How Britain Paid for War

Bond Holders and the Financing of the
Great War 1914–32

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STATEMENT OF ORIGINALITY

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ABSTRACT

This thesis identifies and analyses the sources of finance that provided the resources allowing Britain and its allies to achieve victory in the First World War. The research uses, for the first time, the previously unopened ledgers at the Bank of England containing the identities of individuals and businesses buying War Loans 1914–32. Using random sampling technique, the research tracks over 6,000 investors in three series of War Loan to form a picture of capital providers over the period. The thesis concludes that the nature of these providers changed significantly. At the outbreak of war, London-based wealthy individuals and financial houses disproportionately provided capital, but by the years 1919–32, the source had shifted to the English North East, North West, and Scotland. That geographic shift reflects, in part, the re-cycling of large profits earned on war industries during 1914–18 into safe government securities in the years after. Drawing on files at the Bank of England and the National Archives, this research concludes that despite the substantial wealth of domestic investors, Britain had to engage in a 'battle for capital' that included previously unthinkable levels of tax and the control of investment; controls including threats of confiscation and outright confiscation of foreign securities; a bar on new competitors in the capital markets; and ultimately borrowing terms so generous they weighed on Britain's finances for a generation. Design of the largest group of securities was agreed between Treasury officials and some of its wealthiest financiers. Although much of the advertising and publicity drive to raise war finance was directed at the large working class and small savers, the research concludes that War Loan capital was overwhelmingly provided by Britain's wealthiest investors. They were also the people who benefitted most from their holdings in the years to 1932.

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CHAPTER 1
Introduction

The purpose of this research is to understand how Britain raised the capital for the purpose of financing itself and its allies in the First World War. From the outbreak of war until the end of the fiscal year of 1918–19, some £1,365 million was raised abroad, three-quarters of it from the US. But of the £7,280 million post-war debt, over four-fifths was raised in Britain.[1]

One unanswered question about British conduct during the First World War is where did all that capital come from? This research will look at that question, as well as some ancillary matters including the mechanics of fund raising and the methods of persuasion, inducement or even coercion which might have been applied. There is a broader question here as well: How could the world's first global war have been carried out on an industrial scale for as long as it was without complete economic collapse of all combatants? Understanding where the capital came from and why Britain did not run out of it during or after wartime help us to provide an answer to that question.

Much of the historiography about the First World War examines the military conflict itself, the composition of men and material that went into warfare and the political negotiations both within national combatants and between them. The finance and economics of the First World War have also received historians' attention. Economic historians including Adam Tooze, David Stevenson, and Avner Offer have addressed these in their general accounts of war.[2] More specifically, Stephen Broadberry and Peter

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[1] Stephen Broadberry and Peter Howlett, 'The United Kingdom during World War I: Business as usual?', in *The Economics of World War I*, ed by Stephen Broadberry and Mark Harrison (Cambridge: Cambridge University Press, 2005), 206–34.

[2] Adam Tooze, *The Deluge: The Great War and the Remaking of Global Order 1916–31*, (New York, NY: Penguin Group, 2015). David Stevenson, *With our backs to the wall*, (Cambridge, MA: Harvard University Press, 2011. Avner Offer, *The First World War: An Agrarian Interpretation*, (Oxford: Oxford University Press, 1989).

Howlett have looked at Britain's economic conduct before and during the First World War.[3] However, war finance has not been the central theme of their scholarship. Other historians such as David French and Kathleen Burk, who have looked in depth at British war finance have also examined the relationship between availability of finance and the ability to carry out war.[4] Much of the existing research concentrates on the macroeconomic aspects of war finance. What this research contributes to our understanding of the First World War is a close look at the microeconomics of war. The research provides the first close look at the sources of the finance which made it possible for Britain and its allies to outlast the Entente and declare victory in 1918. The reason this aspect of warfare has received so little scrutiny is partly because the data upon which any analysis would be based was off-limits to historians; under British privacy rules, these data are being made public now. This makes it possible to unravel, for the first time, questions about how, and from whom, Britain obtained war finance. 'No general history of the First World War has given proper attention to its financing,' wrote Sir Hew Strachan, in the preface to his short book on the subject published in 2004. Before the war, he observed, commentators could not see how stock markets could adapt to a drawn-out war, nor did they see how states could finance it. Commentators, Strachan concludes, were proven wrong.[5]

In this research, I will attempt to answer the fundamental question about why Britain and its allies did not run out of capital while Germany did. I will look at where the sources of the capital that financed the purchase of arms, food and logistics for the military came from in the first place. That capital was also instrumental to ensuring that those on the home front remained fed and clothed, guaranteeing continued domestic political support for war. Was the capital enticed or was it coerced? Was it handed over out of a sense of patriotic duty or was it lured by the prospect of better rates of return than could be

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[3] Broadberry and Howlett, 'The United Kingdom During World War I'.

[4] Kathleen Burk, *Britain, America and the Sinews of War 1914–1918* (London: George Allen & Unwin, 1985) David French, *British Economic and Strategic Planning 1905–1915* (London: Routledge, 1982).

[5] Hew Strachan, *Financing the First World War* (Oxford: Oxford University Press, 2004), Preface.

obtained elsewhere? This research will also try to answer another fundamental question: what was the original source of these investors' capital? Was this capital earned? Was the wealth inherited? Was it some combination of the two? The research will also look at the extent to which war itself either added to investors' holdings of capital or diminished it. This research also adds a new dimension to historians' understanding of the First World War and its aftermath; that is, the process through which the reduction in the gross inequality in income and wealth in Britain happened. Although there are several comprehensive studies that show the beginning of a decline in inequality around 1914, much less work has been conducted that analyses how that process happened.[6] By tracking the occupations and industries through which investors earned their capital, a picture of the process by which wealth spread further down the ladder emerges. This research allows for the first time a granular and intimate look at the process through which those on the lower rungs of that ladder acquired the capital that pushed them further upwards. However, it also offers insight into another conclusion drawn by the economist Thomas Piketty; the data pulled from the ledgers suggest that those with financial capital at the start of the First World War were best placed to obtain the highest returns from it.[7]

This research starts with the assumption outlined by historian David Edgerton that private ownership of capital is not just ancillary to the evolution of modern Britain; it is central to it. The politics of capital, whether in the realm of free trade or in that of global orientation, were the central political battles of the twentieth century. Returns on capital

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[6] Peter Lindert, Wen Hai and Shunli Yao, 'Three Centuries of Inequality in Britain and America', *Econstor, Leibniz-Information Centre for Economics*, Working Paper 97–9, (1997): 9–16. A.L. Bowley and Josiah Stamp, *The National Income, 1924* (Oxford: Clarendon Press, 1927), 1–59. Thomas Piketty, *Capital in the Twenty-First Century* (Cambridge, MA: Belknap Press of Harvard University Press, 2014), 343–4.

[7] Piketty, *Capital in the Twenty-First Century*, 25–7. Piketty shows that accumulated wealth contributes disproportionately to the stock of new wealth because it rises more quickly than income from labour or national income generally.

were part of that battle. Edgerton argues.[8] That primacy of capital would also play a role in shaping fiscal and monetary policy as the nation struggled to repay its staggering debt burden; Britain eschewed the policy of fellow combatants who erased their war debts through inflation. Indeed, it pursued deflationary monetary policy in the post-war years, a policy which enhanced real returns on capital, especially that invested in War Loan. This research will also look at what happened to the capital in the years after the war, when the bill for the conflict fell due. The debate over how to pay for the First World War formed the backdrop to the most bitter political disputes during the post-war years. As Martin Daunton put it, the challenge was to deal with the immense burden of war debt without alienating taxpayers or undermining the legitimacy of the state.[9] Of course, borrowing to pay for war was not the only option open to Britain or any of the other 1914 combatants. Borrowing to pay for war is but one side of a two-sided coin; nations can coerce capital from their citizenry via taxation. To classical economists, it does not matter whether a state finances its activities through taxation or borrowing. Both are mechanisms which allow consumption and what differs is timing. Borrowing allows higher consumption today to be paid for tomorrow.[10] 'Taxation and borrowing by states are simply mechanisms to smooth consumption over time of goods and services that are needed to promote the state's interests,' wrote Sir Josiah Stamp, architect of Britain's Excess Profits Duty, (EPD), which formed a critical element of taxes raised to finance war.[11] Britain indeed raised income and other taxes considerably during wartime, but the proportion of war paid for by tax levies was a far smaller proportion of that which underpinned the

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[8] David Edgerton, *The Rise and Fall of the British Nation: A Twentieth Century History* (London: Allen Lane, 2018), xxiii–xxiv.

[9] Martin Daunton, *Just Taxes: The Politics of Taxation in Britain 1914–1979* (Cambridge: Cambridge University Press, 2007), 60.

[10] Stephen Broadberry and Mark Harrison, *The Economics of World War I* (Cambridge: Cambridge University Press, 205), 215. The authors point out that the concept of Riccardian equivalence underpins this idea. The framework is that of intergenerational transfers and tax smoothing. Borrowing smooths consumption across several generations while taxation reduces consumption for one generation.

[11] Josiah Stamp, *The Financial Aftermath of War* (London: Ernest Benn, 1932) 26.

costs of earlier wars in the nineteenth century and totalled around a fifth of expenditure.[12] Given the challenges to the legitimacy of the state in the post-war years, there are good reasons to doubt that Britain could have raised more through taxation than it did. That left borrowing as the primary mechanism to finance war. Still, Britain did better than any other of the original 1914 combatants in collecting tax at the outset of war. In the 1913/14 fiscal year, direct tax revenue on incomes accounted for 45.8 per cent of government revenues in Britain compared with 15.2 per cent in France, 13 per cent in Germany and 5.8 per cent in Austria-Hungary.[13] Thus, Britain, with its open and limited government and centuries-old institutions, was better placed than any of its allies or enemies to finance war.

To carry out the research that addresses the question about the sources of capital, I have drawn on samples of over 6,000 individual investors whose details are contained in several thousand ledgers lodged at the Bank of England, which acted as agent for War Loans. These ledgers have been unopened for a century. They include details not only of the names and addresses of investors, but also their occupations, method of purchase and dates and methods of disposal. This is the first time that these ledgers have become available to historians. To systematise the enquiry, the samples have been narrowed down to just three broadly consecutive series of ledgers from which the data are drawn; the first series is that of investors purchasing the 3½% War Loan initially offered for sale in November 1914 at the outbreak of war and covering secondary trading through 1918. The second ledger series covers the 5% War Loan 1929–47, the single largest capital-raising of the First World War. Because older issues of government securities with lower coupons became convertible into this stock, the ledgers cover an extensive period of secondary trading from 1915 to 1924. The third ledger series covers secondary trading in the 5% War Loan in the post-war years from 1919 to 1932. In 1932, the coupon was

[12] Daunton, *Just Taxes*, 38.

[13] Niall Ferguson, 'Public finance and national security: the domestic origins of the First World War revisited', *Past & Present*, 142 (1994), 160.

unilaterally cut to 3½% after Britain abandoned the Gold Standard and the Great Depression set in.

To view investors' choice to buy War Loan during 1914–32 as an exercise in the prevailing culture of investment is a far too simplistic and narrow a way of looking at the fund-raising exercise. It is certainly the case that there had been a growing trend of British investment in tradable securities, well established since the early eighteenth century and one which accelerated in the nineteenth century. But to see purchase of War Loan as a simple continuation of that trend misses the point entirely. That is because the First World War completely distorted both the supply of, and demand for, capital. Second, what is clear from earlier histories of Britain's pre- and post-war economy, is that the First World War irreparably altered both the concentration of capital and the form in which it was held. Third, wartime required government interference in private wealth-holding, in industrial activity and in the distribution of profits between labour and capital, that was previously unimaginable within Britain's political system. This interference took the form of sweeping changes to tax policy, price controls, import restrictions and interference in labour disputes, among other measures.[14] Under those conditions, the decision to purchase War Loan would have been unlike that of any earlier decision to invest in tradeable securities. The advantage of taking samples from ledgers of War Loan investors over such an extended period is that it allows us to see how all these changes manifested themselves among holders of capital during and after wartime.

The system of financing war in Britain at the outbreak of war in August 1914 was centuries in the making. A large body of literature views modern fiscal states, such as Britain was in 1914, as the product of an evolutionary process forced by military technology which became ever more sophisticated and costly. Emergence of the modern fiscal state enabled nations to engage in long and costly wars to ensure their own survival. In this section, I will describe the processes through which this institutional

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[14] Ernest V. Morgan, *Studies in British Financial Policy 1914–25* (London: Macmillan & Co, 1952), 33–66.

architecture was built in Britain. By August 1914, Britain had in place national, centuries-old systems both for gathering tax revenue and for borrowing capital for warfare. Both were widely accepted domestically. The former facilitated the latter; tax collection reassured lenders that the state had the capacity to pay debt service in full and on time. The availability of a deep and liquid secondary market reassured investors that they could redeem their capital at any time. In August 1914, not one of the other combatants on either side had the institutional architecture that ensured British access to capital, not only during the First World War but in the unstable years which followed.

Britain as a Modern Fiscal State

I will begin by describing the apparatus of borrowing available to Britain in August 1914. This is what instilled confidence in those who had capital, to part with it.[15] The conventions of raising state finance for war had their roots in medieval Italian city states, but by the seventeenth century, these were entrenched in trading capitals such as London and Amsterdam.[16] Mark Dincecco notes that when it came to taxation, states where power was relatively 'open' – as Britain's was after the Glorious Revolution in 1688 – faced less opposition to tax-raising.[17] Douglass North and Barry Weingast trace Britain's ability to raise war finance on attractive terms back to that period when the commitment to honour property rights was enshrined in institutions. This enabled it to raise outstanding debt by a factor of nearly ten between 1695 and 1750 without raising

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[15] Richard Bean, 'War and the Birth of the Nation State', *Journal of Economic History*, 33.1 (1973), 203–21. Bean notes that while medieval wars could be financed by more modest taxation such as that on wool exports, the development of cannons that could breach castle wars required much greater spending on military hardware and troops.

[16] John H. Munro, 'The Medieval origins of the 'Financial Revolution: usury, rentes and negotiability', (Toronto: Department of Economics, University of Toronto*, Munich Personal RePEC Archive*, 2002), 505–61. The development of the rentier class grew out of emergence of a class of (mainly) men with idle capital seeking to earn a steady rate of return on their funds. For governments, these proved cheaper to service than outright loans.

[17] Mark Dincecco, 'Fiscal centralisation, limited government and public revenues in Europe 1650–1913', *Journal of Economic History*, 69, 1, (2009), 48–103.

inflation.[18] In a similar vein, Michael Bordo and Eugene White compare British and French finance during the Napoleonic wars in the late eighteenth and early nineteenth centuries, making the case that the latter was effectively locked out of capital markets because creditors distrusted the State. France's persistent use of confiscation, capital levies and inflation to repay debts made investors sceptical about odds of repayment.[19] Creation of a system of revenue collection and a credible legal framework to protect property rights on their own were still not enough. What was also needed was a large and liquid market for government debt. 'For unless facilities had existed to enable lenders to sell to a third party their claim on the State to annual interest, the government's system of long-term borrowing would never have got off the ground,' Peter Dickson wrote in his account of the evolution of Britain's debt market. 'The State would have been obliged to promise repayment in a limited number of years – and to keep this promise. This would have effectively stopped it from borrowing on the scale it needed.'[20] Creation of the Bank of England in 1694 to oversee that market was a key element in Britain's ability to raise funds for war. The system of public borrowing which developed in the first half of the eighteenth century enabled Britain to spend on warfare far more than its annual tax revenues would have supported. This allowed it to defeat larger, wealthier France, Dickson concluded.[21]

Germany, Britain's chief antagonist, certainly did not have the institutional architecture for capital-raising. Germany's chief defect, according to historian Margaret Macmillan, was that despite its rapidly industrialising economy, it did not have the institutions capable of harnessing that to domestic finance in the late nineteenth century. Among

[18] Douglass C. North and Barry Weingast, 'Constitutions and Commitment: The Evolution of Institutional Governing Public Choice in Seventeenth Century England', *Journal of Economic History*, 48, 4, (1989): 808–832.

[19] Michael D. Bordo and Eugene N. White. 'A Tale of Two Currencies: British and French Finance During the Napoleonic Wars', *Journal of Economic History* 51, 2, (1991): 303–16.

[20] Peter G.M Dickson, *The Financial Revolution in England: A Study in the Development of Public Credit 1688–1756* (New York, NY: St. Martin's Press, 1967), 457.

[21] Dickson, *The Financial Revolution*, 9.

other things, its federal parliament, the Bundesrat, had no authority to impose nationwide taxation. Moreover, unlike in Britain, the Kaiser, Wilhelm II, oversaw the armed forces and the Bundesrat had no authority to rein him in.[22] However, Germany was a rapidly rising and increasingly wealthy European state.[23] By 1914, Germany's official position appeared to be that mechanisms for war finance, so crucial to Britain, did not matter much in its own case. That was because, according to its own rhetoric, it intended to win the war quickly and extract costs from the vanquished.[24] Indeed, Margaret Mary Gowing and William K. Hancock, writing Britain's own internal account of economic management during the First World War, reflect upon the contrast between the methods of war finance employed in the First World War by Britain and Germany respectively. Germany's post-war misfortune, they wrote, stemmed from the fact that the Germans 'had no other habit of war finance except that of winning their wars quickly and making the vanquished pay; in 1914, they did not even have an income tax.'[25]

Even France, Britain's strongest and wealthiest ally, had limited capital-raising capacity. It was little better than Germany in extracting capital via taxation. Resistance to imposition of tax after 1870 was a common political theme. 'The strength of the *rentier* in French society – economically, socially, politically – meant that hostility to an income

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[22] Margaret Macmillan, *The War that Ended Peace* (London: Profile Books Ltd., 2013), Chapter 3. Macmillan also notes that the recent incorporation of the single, largest state, Prussia, into Germany posed challenges to the authority of its central government. The wealthy 'Junker' families of Prussia thus had disproportionate influence in Germany generally.

[23] Avner Offer, *The First World War: An Agrarian Interpretation* (Oxford: Clarendon Press, 1989), 321. Output in Germany per capita grew by more than 60 per cent in 1891–1911 while Britain's output grew at about half that rate.

[24] Gerd Hardach, *The First World War: 1914–1918* (London: Penguin Books, 1977), 141. Hardach quotes Germany's finance minister, Karl Helfferich, as describing bank borrowings during wartime as a 'temporary expedient'. He vowed to collect repayments from the Entente. 'The instigators of this war have brought upon themselves the leaden weight of billions; it is for them, not us, to drag it with them for decades to come.'

[25] Margaret Mary Gowing and William Keith Hancock, *British War Economy* (London: HMSO, 1949) 3.

tax was deeply ingrained,' Horn wrote.[26] An income tax had been voted in July 1914, just before the outbreak of war, but its postponement was justified by war.[27] Indeed, France quickly became dependent on Britain for its dollar-denominated finance. French, in his account of British war finance, blames this on the absence of a credible French system of tax collection. British officials were 'dismayed' to be asked by France in November 1914 for help in raising a loan in London, a centre for global capital. Britain had assumed that France would have no difficulty attracting capital because of its large gold reserves. However, the French were so uncertain of their standing with international investors that they needed Britain to stand behind the loan.[28]

By August 1914, finance had long been central to the ability of modern states to wage war. But in a rapidly industrialising world, the increasing sophistication of war technology and the global nature of the First World War ensured that costs would spiral beyond any that had previously been imagined. Britain, with its centuries-old institutions of tax collection and financial markets was far better placed than any other combatant for the challenges of the new type of warfare which was about to unfold. In the interwar years, the debt which Britain had taken on to pay for war dogged its efforts to manage trade-offs between fiscal and social policy. The biggest single capital-raising effort – the 5% War Loan of 1929–47 – into which all other War Loans were convertible – was issued in 1917 and remained outstanding until it was called by the then Chancellor, George Osborne, in 2015.[29] Thus, War Loan remained hard-wired into the nation's social, economic and political history for very nearly a full century. Understanding the mechanics of capital raising and the nature of the investors who supplied the capital offers a new insight into the First World War.

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[26] Martin Horn, *Britain, France and the Financing of the First World War*, (Montreal: McGill-Queen's Press, 2002), 20.

[27] Hardach, *The First World War*, 161–2.

[28] David French, *British Economic and Strategic Planning 1905–1915*, (Abingdon: Routledge 2006),151.

[29] UK, HM Treasury and The Rt Hon George Osborne*, Chancellor to repay the nation's First World War debt*, London, Press Notice, 3 December 2014: https://www.gov.uk/government/news/chancellor-to-repay-the-nations-first-world-war-debt

Organization of this thesis

The chapters will be organized as follows:

Chapter 2: The Battle for Capital

Britain was the wealthiest of all the combatants at the outbreak of the First World War, but that did not guarantee that it would be able to use the capital accumulated by its businesses and individual investors for war purposes.[30] In fact, Britain was forced, almost immediately upon the outbreak of war, to begin the process of quarantining capital. This turned the international capital markets into a kind of 'war front' immediately upon the outbreak of war. In this chapter, I show how three separate and clearly identifiable 'fronts' emerged over the course of the war and how the weapons deployed for each of these changed over time.

The first front, which opened upon the declaration of war against Germany, was that of preventing British capital – and later, capital from neutral nations – from drifting into the hands of Germany and its allies. The second front was that formed by the need to maintain the Sterling exchange rate. The primary focus was the rate versus the US Dollar. The third front is the one with which this research is primarily concerned; that is, the battle to persuade, coerce, cajole or otherwise entice its own domestic investors to loan their capital to the war effort.

Chapter 3: Where did the Capital come from? Investors in Unnamed Occupations

In this chapter, I will outline one of the primary challenges that Britain faced in raising capital for war from its own citizens; wealth and income were wildly unequally

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[30] Nicholas Crafts, *Forging Ahead, Falling Behind and Fighting Back: British Economic Growth from the Industrial Revolution to the Financial Crisis* (Cambridge: Cambridge University Press, 2018), 2. Britain's GDP per capita in 1913, measured in 1990 US Dollars, was $4,920, second only to that of the United States which had surpassed it only since 1899. Crafts cites data from Angus Maddison, *Historical Statistics of the World Economy 1–2008 A.D.* See: http://www.ggdc.net/MADDISON/oriindex.htm (accessed 1 September 2019).

distributed. That meant that the pool of capital available to tap was deep, but very narrow. Britain's first effort to raise capital was a dismal failure. Moreover, even gaining access to the ledgers is not enough to answer the question about where capital came from. That is because most of the capital in the first sample and a lesser percentage of the second sample was loaned by investors whose occupation is not revealed. These investors fall into two general categories, each of which differs so starkly from the other that they appear to be entirely different sources of capital altogether. The first category is that of women, who are only identified in the ledgers by their relationship to a man; they are either married, widowed or spinsters. The second group of investors with no stated occupation are men who, instead of describing their profession or business, describe themselves as 'Gentleman', 'Esquire' or some honorific. Using Census, Probate and other public records, I establish that while this group includes some who are likely to be able to live on investment income alone, most are engaged in some occupation, business or profession.

Chapter 4: Where did the Capital come from? Investors in Named Occupations

Nevertheless, a large and growing percentage of male retail investors disclose their occupation in the ledgers. This percentage increases as the sample period moves into the interwar years. Two overall trends become apparent; the first of these is what I am describing as 'the long arm of inherited wealth' forms the original source of capital. A disproportionate percentage of capital in the first sample comes from those engaged in the primary professions of clergy, law, medicine and military, which occupy a tiny percentage of males in Britain in 1914. These are professions for which entry often requires a private education off-limits to even many in the middle classes. Had these men not come from relatively wealthy households, the requisite level of educational attainment would have barred them from their chosen profession. Others are engaged in businesses which they appear to have inherited from a relative. However, the second trend that emerges is one which for the first time sheds a light on the granular impact of war on personal wealth. I will show in this chapter that there is a rising percentage of investors whose business has been well placed to gain from excess profits during wartime This chapter offers an unusual granular and intimate insight into exactly how the First

World War altered ownership of wealth and income which has not previously been available.

Chapter 5 The Stark Geographic Shift

In this chapter, I will show how the centre of investor gravity shifted sharply over the years 1914–32. Indeed, the geographic shift between the first and third samples is the single most profound observation in the exercise and in this chapter, I will explain the developments during and after wartime that are likely to have created this shift. In total, this shift goes some way towards illustrating a point made in the two previous chapters; that is, war caused profound changes in the way that capital and income were owned and distributed before, during and after, wartime. It also helps to explain why Britain was flush with capital during the post-war years and did not need to turn to inflation of its monetary base – unlike France and Germany – to be able to service and retire its debt. Britons whose capital had been held in highly profitable businesses during wartime were able to crystallise that, using the proceeds to purchase War Loan. The first section of this chapter will look at the extreme concentration of investors from London, both by the number of investors and the capital these devoted to War Loan; just over half of all purchases in the first sample came from London-based investors. This section will look at the role of London as a centre for personal wealth, as well as its role as a centre for institutional capital.

The second section of Chapter 5 will look at developments during wartime likely to have encouraged this geographic shift in the investor base. It will include a description of how London Stock Exchange rules on the trading of government stock might have led to a ‘tilt’ before the outbreak of war in holdings towards investors based in London and the south east. Provincial investors found purchases of government stock to be more cumbersome and expensive than those dealt in by Londoners. The section will also look at another aspect of government policy likely to have a profound effect on who purchased War Loan. From late 1916, after the fall of the Asquith government, David Lloyd George’s government began to make serious efforts to control profiteering and profits generally and to ensure that all economic and industrial activities were devoted to winning the war. It was the start of a process that lasted through the remainder of the war that saw government take increasing controls over business, prices and labour disputes. This section will single out those businesses and industries that appeared to be particularly profitable, and which, by the time of the second sample, are already emerging as the probable source of War Loan investor capital.

The third section of this chapter will look at the sample from the post-war years and the stark shift that emerges. London-based investors, by this time, account for under nine per cent of capital. Investors tend to live near the businesses they own and operate, a factor which appears to account for this spectacular shift. The north east, north west of England, along with Scotland, were home to Britain's 'old' export industries of coal mining, shipbuilding, cotton and wool production, and iron and steel production. While these were highly profitable during wartime, demand for their output fell very sharply in the post-war years. I will show how the percentage of investor capital whose source can be determined increasingly came from these 'old' export industries. I will argue that the geographic shift is, in fact, a 'recycling' of capital being extracted from low-returning businesses into safe War Loan.

Chapter 6: The War After

This chapter will look at the four aspects of the post-war period covered by the third sample of War Loan investors; it will first look at the economic and fiscal challenges Britain faced in the immediate post-war years. It will consider how government's response to these altered with the nation's changing political complexion. Second, it will look at how these changes might have affected the decisions of various groups of investors to buy or sell War Loan. Third, it will look at the potential tax leakage from the unusual structure of War Loan which made it possible for investors to avoid paying income taxes at a time when Britain desperately needed tax revenues for reconstruction. It will also look at the rising concentrations of War Loan holdings in the hands of fewer and fewer investors, a pattern that not only offered significant incentives to try to avoid paying tax but which was likely also to include access to a mechanism to do so. And finally, it will look at the debate and the practice of conversion of the 5% War Loan

1929–47 into an undated security carrying a coupon of 3½% and which was not redeemed until 2015.

Chapter 7: Conclusion

In this final chapter I offer some general conclusions to the thesis and identify its contribution to our understanding of war and finance in early twentieth-century Britain. I also identify areas for future research.

CHAPTER 2
The Battle for Capital

After Germany's failure to secure a quick victory in northern France at the Battle of the Marne in September 1914, the First World War settled into a stalemate on the Western Front, with each side making little headway to capture, or to free up already captured, territory. Within weeks of its assault, the Western Front had solidified into a maze of trenches and barbed wire covering the area from the English Channel to Switzerland, as the allied armies unsuccessfully sought to force back the German advance beyond Belgian and French borders. This stalemate was to last for more than the next three years, costing millions of lives on all sides and far more than that when measured by the value of destroyed land and resources. Within months of the outbreak of war, it was becoming apparent that the First World War would be a war of attrition, particularly as it was fought on the Western Front. That meant that the side with the resources enabling it to outlast its opponents would be the one to declare victory in the end and determine the opposing side's terms of surrender.

The Allied victory in November 1918 is freighted with the imagery of brilliant battle tactics, immeasurable suffering among men and horses and an indefatigable determination to win. The reality is probably more prosaic; endurance on the battle front and on the home front would be the deciding factor in the outcome of war. Outlasting the enemy required access to capital, making the effort to gather it – and harness it exclusively – a central and largely unacknowledged theme of the war. The historian Jonathan Boff notes that the edge that the Allies possessed was in the form of maritime capabilities through ownership of both large, ocean-going navies and commercial maritime fleets giving them access to global resources, that of the Central Powers was in land armies. The Allies had an edge but at the outbreak of war, it was not that great.

Jonathan Boff characterises the stand-off as one between a whale and an elephant: 'each supreme in its own element, but neither able to defeat the other.'[31]

The Three 'Fronts' in the Battle for Capital

This chapter will set out the underlying premise for this research project; that is, that the outcome of the First World War depended on Britain and its allies having access to greater capital resources than those available to the Central Powers. This chapter will set out why Britain's superior wealth at the outbreak of war in August 1914 could not guarantee that its resources alone were enough to ensure it could outlast its enemies. The 'Battle for Capital' was not a single unified effort. Rather, for Britain, it had three distinct 'fronts', each aimed at a different competitor for capital. How the battle proceeded in Britain on each of these fronts, and the relative success of each, will be analysed, in turn, in this chapter.

The need to conduct a battle on each of these fronts emerged very quickly after the outbreak of war. Indeed, the first 'front' manifested itself on the day war was declared. That 'front' was the battle to keep capital out of the hands of Germany, Austria-Hungary and later, the Ottomans. As the war went on, that battle was extended to preventing capital from leaking out to the enemy via neutral nations or through neutral banks with branches in Britain. The second front was that which first emerged by mid-1915 and which reached a frenzied pitch by the end of 1916. Because of Britain's growing dependence on the United States as the main source of commodities for food and arms, maintaining the sterling/US dollar exchange rate prevailing at the start of war was crucial. The second 'war front' therefore, was an increasingly fraught effort to keep that exchange stable. Had Britain been unable to prevent the slide of its currency against the US Dollar, it would have driven the cost of all supplies beyond the resources that it could muster and

[31] Jonathan Boff, 'Fighting the First World War: Stalemate and attrition', Accessed 17 March 2019: https://www.bl.uk/world-war-one/articles/fighting-the-first-world-war-stalemate-and-attrition

would likely have forced France to surrender by the end of 1916.[32] Germany, after suffering terrible hunger following a poor harvest in 1916 and the 'turnip winter' of 1916–17, made the decision to resume unrestricted submarine activity and announced it on 1 February.[33] That brought the United States, and its resources – and perhaps most important, American loan capital – into the war on the side of Britain. The chapter draws on materials found in Kathleen Burk's study of British-American war finance and on materials used in Jeremy Wormell's analysis of British government finance in the first third of the twentieth century.[34] It also draws on new materials found in The National Archives and Bank of England Archives. These records show, for the first time, just how serious Britain was about compelling capital from banks and insurance companies. In its desperation to raise capital in January 1917, Chancellor Andrew Bonar Law threatened these with seizure of assets if they failed to deliver specified amounts of new financing.[35] The documents also highlight the seriousness of private sector efforts to drive down the value of the US dollar. These centred on building up the US gold reserves in the hope of inflating American money supply, thus cheapening the US dollar.[36]

And finally, this chapter will set out the third 'front' in the Battle for Capital; that is, the effort to persuade or force Britons to loan their own capital to the war cause. The later chapters in this research will spell out in detail just who these Britons were and make some conjectures about the circumstances prompting their investments at certain points in time. The later chapters will show in detail how, and when, the investor base shifted in

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[32] Martin Horn, *Britain, France and the Financing of the First World War* (Montreal: McGill-Queens Press, 2002), 165.

[33] Holger Herwig, *The First World War: Germany and Austria-Hungary 1914–1918* (London: Bloomsbury, 2014), 38.

[34] Burk, *Britain, America and the Sinews of War*, 77–95. Jeremy Wormell, *The Management of the National Debt of the United Kingdom, 1900–1932* (London: Routledge, 2000), 187–213.

[35] TNA T172/746, Summary of Meeting between Chancellor, Treasury Committee of London Clearing Bankers, 3 January 1917.

[36] BoEA, C91/4, Letter to Chancellor, from W. Cunliffe, 11 August 1916. BoEA, C91/4, Letter, G. Nairne to Treasury, 23 November 1916.

the years 1914–32. Understanding the efforts made to persuade this capital to come forward, and matching it with the response, offers a special insight into the First World War that has not been previously available.

There are two general observations to be made about the battle for capital; first, that some activities, while nominally aimed at one front, influenced other fronts. For example, as this chapter will later describe, formation of an American Dollar Securities Committee had the intended effect of helping to stabilize the exchange rate, the second of the three war fronts. The body also helped on the third front: the effort to persuade wealthy investors to buy War Loan. Investors, as will be described in later chapters, were compensated for their dollar securities by payment in Exchequer bonds, convertible into later issues of War Loan. This created demand for subsequent issues of War Loan from a population already accustomed to investing in tradeable securities. The second general observation is that even after the war was over, the battle for capital continued. While preventing Germany from collecting capital was no longer an objective, keeping sterling capital inside Britain remained a goal of government policy as Britain sought to return to the gold standard at its pre-war parity with the US dollar.

And finally, this chapter will describe in detail the third 'front' in the Battle for Capital; that is, the effort to attract – through a variety of measures- the capital held by Britons and persuade them to allow that capital to be temporarily harnessed to the war cause. The third 'front' was the sum total of Britain's efforts to persuade its own, wealthy – and later, its less-wealthy – investors, along with its growing numbers of workers in munitions and war-related industries, to part with their savings and securities, cashing these in to loan new funds to government.[37] It is this front that is the centrepiece of this research. What I will show in this chapter is the limited effectiveness of simple appeals to patriotism and the alternative mechanisms that Britain used during the war and in the years after, to ensure that capital would be forthcoming.

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[37] TNA, 1/11898, File headed 'Committee on War Loans for the Small Investor, *Report of Committee on War Loans for the Small Investor,* Draft Report 1, issued 1 January 1916.

While Britain proved more willing than other combatants to coerce capital from its citizenry via taxation, the bulk of war costs were financed by borrowing. This was a departure from past British wars where taxation covered 86.6 per cent of the war with France by 1815, and 52.6 per cent of costs of the Crimean War.[38] Taxes were also increased, with the lower threshold cut to annual incomes of £130 per year from £160 per year and the imposition of higher duties on imported goods. While direct taxes totalled 57.5 per cent of revenues raised in the 1913/14 fiscal year and indirect taxation accounted for a more modest 42.5 per cent, that had reversed by the time the war had ended. In 1919/20, that mix had been reversed with 75.1 per cent coming from direct taxation while only 24.9 per cent came from indirect taxes.[39] Moreover, as Britain learned in the first few months of war, the patriotism that encouraged over 500,000 to sign up to fight just in the first two months of war, was not present when it came to capital.[40] A quick overview of the sample results underscores how Britain struggled to attract capital from pockets of private wealth. Institutional capital from British banks and insurers formed a substantial part of the investment in wartime loans and accounted for just over half the capital represented in the first sample of investors, but could never by itself have contributed enough to meet the needs of Britain and its allies.

Table 2.1: Retail vs. Institutional Investment in War Loan

	3½% 1925–28		5% 1925–47		Converted to 3½%	
	% total investors	% total holdings	% total investors	% total holdings	% total investors	% total holdings
Retail investors	97.0	56.2	98.9	84.6	98.0	74.4
Institutional investors	3.1	43.6	0.7	15.5	2.0	26.1

As the war unfolded, a carrot-and-stick approach to capital-raising developed. The effort to entice capital led to increasingly strict limits on investment alternatives to War Loan.

[38] Daunton, *Just Taxes:* 38.

[39] Daunton, *Just Taxes*, 38.

[40] Arthur Marwick, *The Deluge: British Society and the First World War* (Basingstoke: Palgrave Macmillan, 2006) re–issued 2nd edition, 75.

These ‘sticks’ included a bar on the export of capital from Britain for anything but commercial purchases and a bar on new capital-raisings without permission from Treasury. This was combined with increasingly generous rewards for investors who voluntarily surrendered their capital. These came in the form of higher coupons on War Loans, conversion features, paper sold at a discount to face value and finally, a previously unimaginable tax break. All were reinforced with a propaganda campaign aimed not just at getting Britons to lend their capital to government but also to conserve it, save it and to avoid consuming it.[41]

Simple inducement and persuasion were never going to be enough to raise the capital that Britain needed to finance itself and its allies and outlast the Central Powers. All throughout the war, political and civic leaders made veiled threats to use compulsion to seize capital from private investors, and internal documents show this was discussed at senior levels within the Treasury.[42] Although government never used outright, uncompensated confiscation, it showed a previously unprecedented willingness to use powers of taxation to grab for itself the capital that it believed was needed to wage war. The combination of increasingly generous inducements to lend capital, coupled with fiscal policy that greatly broadened and deepened the taxpaying base, enabled

[41] TNA T172/712, Text of a Speech on behalf of Queen Mary’s Munitions Fund, nd., no signatures, 1–5.

[42] TNA 170/84, Memo, headed Financial Year 1916–1917, n.d., initials J.B., 1–10. The memo notes ‘Various suggestions for forced loans have been considered. It has been proposed that the Government should compel bankers to hand over to them a certain proportion of their deposits. As these deposits amount to a total of about £1,400,000,000, a forced loan of say 30% would produce over £400,000. But the adoption of this expedient would shake the very foundations of credit and disorganise commerce and industry.’ It was clear that discussions of capital compulsion were also in the public domain. In December 1915, newspapers in Nottingham reported that then-Chancellor Reginald McKenna had been asked in the House of Commons about whether compulsion was to be used in raising capital, to which the Chancellor responded that he ‘did not anticipate any difficulty in borrowing under the usual circumstances’. (No Author, ‘Usual Conditions Still Sufficient’ *Nottingham Evening Post*, 13 December 1915.) In September 1916, the Birmingham Daily Post carried a report of false news in the German press to the effect that capital was being compelled (No Author, ‘Sabotage in Birmingham Munition Factories, Ridiculous German Claim Refuted’, *Birmingham Daily Post*, 13 September 1916).

government to raise billions of pounds of capital. It is this group of investors purchasing War Loans whose identity is contained in the millions of entries within ledgers lodged at the Bank of England which are explored in this thesis.

The structure will make clear that the concept of a ‘Battle for Capital’ is not a single, homogenous pursuit, but rather, one that consists of three different thrusts. The first of these, which went into effect on the day Britain declared war on Germany, was making sure that British capital did not find its way into enemy hands. As the war progressed, that battle was extended to cutting off access that enemy states had to capital funnelled via neutral states or neutral-domiciled banks in London. The second ‘front’ concerned the value of sterling versus other currencies, the US dollar in particular. Only a stable exchange rate could ensure that the cost of imported goods would not rise out of control.

The first battle front: keeping capital out of enemy hands

The following section will look at the relative success of Britain’s efforts on its first war front; that of keeping capital out of the hands of Germany and its allies. This was no small matter, given that Germany and Britain were economically interdependent. Paul Papayoanou notes that the two nations had a particularly strong trading relationship. Although the British had a balance-of-payments in goods deficit with Germany, earnings from invisibles such as shipping, insurance, commodity-dealing, banking, and especially overseas investments more than compensated for it. Roughly 20 per cent of Germany's demand for raw materials and food came from Britain or its far-flung Empire. Those imports were financed by the City of London, and Lloyds of London insured much of the German merchant marine activity. Britain's trade with Germany was increasing in the period before the First World War and it was a greater proportion of total British trade than was trade with France. Britain was the leading market for German exports – 14.2 per cent went to Britain in 1913 – and as a bilateral trading partner, Britain was a close second to the United States in terms of German trade. In the years before the war, both nations were becoming increasingly dependent on trade as a proportion of Gross National Product (GNP) up to 1913. Although there were some rivalries and strains in the Anglo-German economic relationship, both gained from it. Papayoanou notes that Britain’s ability to respond to any military threat from Germany was bound to be a mixture of balancing and conciliation.[43] The two nations were linked by webs of complex financial and trading relationships that could be used to avoid official sanctions on transmission of capital.

Within days of the outbreak of war, Britain issued a variety of edicts – backed by the efforts of British institutions – to prevent the flow of capital to citizens and residents of enemy states. It had long been recognized among military planners that Britain's role as the nerve centre for global trade made it particularly powerful – and conversely, particularly vulnerable – to the economic effects of war. Planning for war had been ongoing in Britain for years before 1914 and the nation considered the implications of its strategic position at the centre of global trade finance. It began to think about how its position would affect its ability to wage war, as well as how warfare would affect its position in world trade. Sir Robert Giffen, an economist and statistician, with ties to Joseph Chamberlain, delivered a talk to the Royal United Services Institute in 1908 about war and finance that highlighted the fragility of private banks in the City of London whose loans formed the foundations of global trade.[44] That same year, Britain's government set up another committee under Lord Desart, Treasury solicitor, to consider the British position on maritime law in the event of war.[45] It completed its report in December 1912. It concluded that a wide European war would have devastating effects on the entire British credit system upon which global trade depended. It urged that the City of London be exempted from any plans Britain had for engaging in economic warfare should hostilities break out with Germany.[46]

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[43] P.A. Papayoanou, 'Interdependence, Institution and the Balance of Power', *International Studies Quarterly*, 41, *(*1997*)*,127–8.

[44] Nicholas Lambert, *Planning Armageddon: British Economic Warfare and the First World War* (Cambridge, MA: Harvard University Press, 2012), 111.

[45] Lambert, *Planning Armageddon*, 93.

[46] Lambert, *Planning Armageddon*, 174–7.

At the outbreak of war, a financial crisis did emerge, closing stock exchanges not only in London but in New York and Paris as well. From the outset, Britain made clear that it viewed access to capital as a key part of its strategy for waging war. London functioned as a nerve centre for international trade through the role played by its acceptance and discount houses. The London Stock Exchange did not officially reopen until 15 January 1915. Britain moved swiftly to protect its capital market long before that, even before the raising of war finance was contemplated. The most important measures taken at first to protect Britain's capital market – the world's largest and the centre for international finance – were proclamations in the first month of war, later codified into legislation. On 10 August 1914, the then Home Secretary Reginald McKenna, exercising powers conferred on him under the Aliens Restriction (No. 2) Order in Council, announced the effective seizure of the assets of the three largest German banks in the UK: Deutsche, Dresdner and Disconto-Gesellschaft. These were only permitted to dispose of assets in respect of transactions agreed before 5 August 1914, to make no new funding commitments and to use their capital for the sole purpose of discharging liabilities as far as possible. All of this was to be done under supervision of a Treasury official. What remained was to be deposited with the Bank of England.[47] Also on that day, King George V issued a formal proclamation barring any enemy alien from engaging in the banking business without permission of the Secretary of State, nor would these be permitted to 'part with any money or securities in the bank where he is or has been carrying on business'. His ruling was made under the new Aliens Registration Act, 1914.[48] Formal rules were issued on 24 December 1914 that barred trading in any issues made after 4 January 1915 that had not been previously approved by the Treasury. Domestic issues had to be shown that they were 'advisable in the national interest'. Moreover, payment for securities purchased could not be made to the seller unless a broker had certified that

[47] BoEA, C40/995, Memorandum, R. McKenna, n.d.

[48] BoEA, C40/955, Memo on Letterhead 'At the Court of Buckingham Palace, Present: The King's Most Excellent Majesty in Council, n.d.

no enemy national had held that security since the outbreak of war.[49] Such measures appear to have been aimed at two goals: first, to ensure that enemies would be starved of the capital normally available in London. The second was to ensure that as much sterling remained within Britain as possible. German citizens holding sterling-denominated securities found these had become unsaleable. In November 1914, Parliament approved the Trading with the Enemy Amendment Act which, among other things, prevented banks and issuers of securities from paying interest or dividends to foreign nationals and required that these instead be paid over to a designated custodian.[50] For its part, the London Stock Exchange, one of the non-governmental bodies voluntarily enlisted in the capital market battle, joined in. It issued rules on 24 December 1914 – while marketing efforts for the 3½% War Loan 1925–28 were still underway – requiring that only British born and naturalized citizens be allowed entry. Moreover, no stock could be considered a 'good delivery' for the purposes of a sale transaction unless it was certified by a banker or broker not to have been in the hands of an enemy alien for six months prior to the date of the transaction.[51]

Throughout the war, Britain sought to uncover and block new avenues through which capital was channelled back to Germany. As early as February 1915, the Bank of England's Discount Office was notified by an unidentified firm that the German owners of Peru's largest sugar business were financing themselves via bills of exchange sent to London under an assumed Spanish name, presumably on behalf of banned business.[52] Minutes of Ministry of Blockade meetings illustrate why Britain felt it needed constant vigilance. For one thing, several of the neutrals were very dependent on Germany for commodities such as coal and the ruling classes in some neutral countries – Sweden and

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[49] E.V. Morgan, *Studies in British Financial Policy 1914–1925, (*London, Macmillan & Co, 1952), 261–263.

[50] *Trading with the Enemy Act*. (5 Geo. 5. Ch. 12).

[51] Morgan, *Studies in British Financial Policy,* 261–3.

[52] BoEA C48/189, Letter marked 'Private & Confidential' to Discount Office, Bank of England, from Principal, unnamed, 27 February 1915.

Spain are singled out – were sympathetic to Germany.[53] Opportunities for engaging in lucrative trade with Germany were rife. At a meeting of the London Exchange Committee, for example, in January 1916, attention was drawn to the fact that a large trade in cut diamonds had sprung up between Britain and the Netherlands and that this might be a method by which Germany financed itself.[54]

Relying on news of increasingly dangerous shortages of foodstuffs, Britain also sought purchasing strategies designed to corner the market in some commodities, expecting shortages to drive up prices when the Central Powers sought to buy badly needed goods. At the end of 1915, the British minister in Christiania urged Britain to buy Norwegian fish and fish oil. By January 1916, the British Treasury had spent the £10 million granted for the purpose. After the purchase was concluded, the agent acting for Britain received a counter-offer from Germany which was willing to pay £500,000 more for the same product. 'The abnormal rise in prices is really an index of our remarkable success and of the lengths to which Germany was prepared to go to obtain the supplies which we have withheld from her,' an internal memo concluded. The memo went on to say that mechanisms forcing Germany to pay more for badly needed supplies would eventually deprive the nation of what it needed to prosecute war.[55]

After the United States joined the Allies in April 1917, Britain sought an even more formal financial blockade of Germany, attempting to organise a ban on doing business with banks in neutral countries that appeared to be lending or extending credits and overdrafts to companies and businesses in any enemy state.[56] In October 1917, the

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[53] TNA, ADM 137/2742, Report, Ministry of the Blockade, 'Confidential' from Spring Rice, C. to Balfour, 21 July 1917.

[54] BoEA, C91/15, Minutes, meeting of LEC, 25 January 1916.

[55] BoEA, C91/4, Marked 'Contraband' and 'Confidential' 'Memorandum by Mr Parker Regarding the Purchase Schemes in Scandinavia, Iceland and Holland', 15 May 1916.

[56] BoEA, C91/11, Letter, on letterhead 'Finance Section, Ministry of Blockade, Headlined 'Suggested Extension of Financial Blockade, date 20/05/1917; C91/11, Memorandum, 'With Regard to the Suggested Extension of the Financial Blockade', 21 June 1917.

London Exchange Committee wrote to the Secretary to the Treasury that it was becoming concerned about the investment of capital abroad by UK residents. [57] The implication was that capital lodged at UK banks abroad could be loaned to enemy governments.[58] By November, a regulation 41D had been added to the Defence of the Realm Act barring transmission of capital outside the UK for any purpose but the purchase of merchandise for re-sale. Significantly, 'the London office of a foreign Bank is, for the purpose of the Regulation, a person resident in the United Kingdom.'.[59] This meant that banks based in neutral countries could not use reserves of their London branches to purchase War Loans of hostile powers.[60]

Overall, the effort to deny Germany access to capital was uneven in its effectiveness, reflecting the ambivalence of allied states. This required offsetting the diplomatic need to maintain relations with neutral countries and take account of domestic financial interests against the desire to starve Germany of capital. For Germany, however, there was little question that the lack of access to capital undermined the exchange value of the mark, limiting its ability to purchase badly needed commodities. Hjalmar Schacht, a German economist who later served as head of the Reichsbank during the Weimar Republic, wrote that his nation had been financially ill prepared for war. 'The war of 1914 isolated Germany from the greater part of the world market. Even at points where Germany bordered on neutral neighbours, the purchasing power of the Mark was limited to the amount which these countries were able to employ to purchase German goods,' Schacht wrote. 'The Mark had become unusable on enemy markets. It had lost its purchasing power.'[61]

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[57] BoEA C91/12, Letter to Secretary of the Treasury, 'London Exchange Committee', from C. Mahon, Secretary, 4 October 1917.

[58] BoEA C91/12, Letter from Bradbury to Cunliffe, 21 November 1917.

[59] BoEA C91/12, Letter, appears a circular to all banks, unsigned, undated.

[60] BoEA, C91/12, Cunliffe to Bradbury, 21 November 1917.

[61] Hjalmar Schacht, *The Magic of Money*, (Paulton:Purnell and Sons Ltd, 1967), 94.

Nevertheless, Germany continued to trade with its neighbours, the value of imported goods in local currency terms totalling about 80 per cent by 1916 of its pre-war level. By 1918, however, this was less than 70 per cent of the pre-war level in local currency terms and less than 40 per cent in terms of the mark's value against gold.[62] Over time, Britain and its Allies had progressively tightened the capital noose.

The second battle front: maintaining the value of sterling on the foreign exchanges

Maintenance of the purchasing power of sterling against the US dollar became the second 'front' in the battle for capital. This section will explain why the sterling/US dollar exchange rate was so critical for the British war effort. It will also look at the extent to which US officials helped or hindered Britain in achieving that currency stability. It will also touch on informal mechanisms that Britain considered to keep the sterling/US dollar rate stable.

The reason for concern about the Sterling/US Dollar exchange rate was simple; over the course of the war, the USA became the main supplier of commodities and supplies, not just for Britain, but for the Allies on whose behalf Britain was financing purchases in Sterling. Because of its supplies of raw materials linked to war-related goods and its ability to supply food commodities that Britain could not produce at home, it became the single biggest supplier to the Allies during the war. While Britain's war strategy in August 1914 was 'Business as usual', by early 1915 it was becoming obvious that Government would have to intervene in areas where markets were not working effectively, such as meat, wheat and shipping.[63] That required Government to undertake purchases itself from the USA. Britain expected that it might have to finance its poorer allies such as Russia and Italy, but it had not expected to need to lend to France. As early as September 7, 1914, it was obvious that France wanted to raise funds in the London money market, a market which Britain had closed to foreign entities. Ultimately, David Lloyd George, then Chancellor, agreed to allow fund raising provided that the money was

[62] Hardach, *The First World War,* 33.

[63] French, *British Economic and Strategic Planning,* 104.

spent on British goods and that France agree to ship some of its gold hoard to Britain.[64] The pound slipped further against the dollar, from $4.86 at the start of the war to $4.79½ by December 1914 and to $4.77 by June 1915.[65] Between December 1, 1914 and June 30, 1915, the value of American exports to Britain exceeded imports by nearly $1 billion. It was estimated that by year end, there would be a further $1.75 billion increase in the value of exports over imports.

By July 1915, Morgan's New York office told the War Office that contracts payable in dollars were coming due and that there were insufficient funds to pay them without forcing the exchange rate down further. Morgan's arranged a loan of $50 million guaranteed by the purchase of dollar-denominated securities from Prudential, the British insurer, and by a shipment of £5 million in gold from the Bank of England. The fear of unpaid bills for US war supplies spurred the Cabinet into action, agreeing first to purchase dollar-denominated securities from British citizens and second, to launch a joint mission with France to the USA to look at the possibility of a joint fund raising.[66] Burk notes that for Britain, it was not just the need to pay for a growing list of war-related commodities. The nation's prestige as a great power was inextricably tied to the role of sterling as a medium of exchange for international trade. If users of sterling lost confidence in its purchasing power, it would tarnish the City and Britain's international standing.[67] Ultimately, Britain and France agreed to send a joint mission to the US to try to raise a dollar-denominated loan. For a variety of reasons, including US domestic opposition to financing a war against Germany, the loan efforts stumbled badly. Reginald McKenna, the then Chancellor, worried about just how far Britain could count on American financial resources. In a memorandum to Cabinet members on 13 September 1915, he pointed out that Britain was supplying clothes, boots, coal, manufactured steel

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[64] Horn, *Britain, France and the Financing of the First World War*, 41–53.

[65] Kathleen Burk, *Britain, America and the Sinews of War, 1914–1918*, (London: George Allen & Unwin, 1985), 62–63.

[66] Burk, *Britain, America and the Sinews of War*, 63–5.

[67] Burk, *Britain, America and the Sinews of War*, 62.

and other commodities to France while Russia, Italy, Serbia and Belgium also expected to be supplied. ‘The problem then for us in the first place is to consider how far it is possible for America to help us’, McKenna wrote. ‘Our present experience does not go beyond the acceptance by American manufacturers of contracts which are believed to be very profitable.’[68] McKenna’s reference to the value of the contracts that the British military were spreading across America was no idle aside. Indeed, according to one member of the Anglo-French mission, much thought and effort was given to trying to persuade subscriptions to the intended loan from munitions contractors. Although DuPont committed itself, others such as Bethlehem Steel ‘would only respond to extensive pressure’. Moreover, many of the contractors had little capital of their own but were dependent themselves upon their bankers. Ultimately, the mission concluded, pressing the contractors to take up subscriptions would likely only force Britain, in turn, to pay more for munitions.[69] In the end, the Anglo-French loan raised $500 million at a yield to maturity of 5.46 per cent, far more expensive than any funds raised in Britain and, after selling commissions were taken into account, the yield was 5.94 per cent.[70] But the difficulties of persuading bankers in the American heartland to part with dollars along with the hostility from various ethnic communities, and investor unfamiliarity with foreign currency debt demonstrated the difficulty Britain would have raising money abroad.

By the autumn, Sir John Bradbury, Joint Permanent Secretary to the Treasury, believed that the financing challenges were so severe that war could only continue if the nation significantly scaled back its support of the allies and withdrew a substantial portion of its troops from the field, sending them back into factories to make goods for export. In a memorandum headlined ‘Limits of borrowing at home and abroad’, and dated 9 September 1915, Bradbury wrote:

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[68] TNA, T172/741 Memorandum McKenna, R. to Cabinet, 13 September 1915.

[69] TNA, T170/102 Memorandum, initials BMB, 09 June 1916.

[70] Wormell, *Management of the National Debt*,152.

> It seems clear that these conditions cannot long continue, and that unless there is an early and very large reduction of the civil and military consumption, an increase of production by the withdrawal of a part of the war forces in the field and their return to civil employment or a dramatic curtailment of credits to Allies, further borrowing here will only be possible at a price of such an inflation of credit in relation to available commodities as will finally upset the balance of exchanges and seriously impair our power to purchase either munitions or foodstuffs in America.[71]

The Bank of England continued its purchases of US dollar-denominated securities through the end of 1915, receiving payment from the Treasury, and by year-end, $233 million had been bought. The challenges of the Anglo-French loan convinced McKenna that the best way to influence the sterling/dollar exchange rate would be to borrow US dollar-denominated securities from British investors and use these to collateralize borrowings in the US in the native currency.[72] By November 1915, McKenna was informing the Treasury commissioners that 'for the purpose of regulating the exchange between the UK and the US, (a group of bankers) have arranged purchases of dollar securities'. The American Dollar Securities Committee was appointed on 3 December 1915.[73] This was one of three key private-sector trade bodies that worked with government to wage war in the battle for capital. The starting point for formation of the Committee was Britain's glaring – and growing – need for cash. In a memorandum early in January 1916, and which was marked 'Secret', Bradbury noted that the entire exercise was an effort to co-ordinate 'our financial with our military effort'. Noting that the shortfall for 1915–16 was expected to be £600 million and that the most which could be raised from taxation or borrowing domestically was £2 billion, Britain faced a significant challenge. 'Of this total amount, only a comparatively small part can be raised abroad and a large part of that in all probability only by pledging foreign securities. Such foreign securities may to some extent be obtained on loan from the holders, but they will have in the main to be purchased out of the proceeds of internal borrowing.' Instead, the strategy

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[71]TNA, T170/85, memo J. Bradbury to Cabinet, 9 September 1915.

[72] Wormell, *Management of the National Debt*, 177–8.

[73] TNA, T1/11889, Letter, M. Ramsay to Treasury, 3 December 1915.

of stabilizing the exchange rate through the organized purchase of dollar-denominated securities was adopted.[74] In December, a memorandum was circulated to insurance and trust companies offering to borrow or sell their securities and noting that an invitation to retail holders of those securities would be circulated as well. In the memo, the Treasury said it preferred to be able to purchase the securities outright rather than borrow them and that investors could either be paid in cash or in 5 per cent Exchequer bonds maturing December 1920.[75] This became ‘Scheme A’. Altogether, purchases under Scheme A totalled a nominal value of £109 million and loans were £84 million.[76]

Economist John Maynard Keynes, acting as an adviser to the Treasury, in an undated memo, apparently in early 1916, summed up Britain’s growing trade deficit with America in the period 1 October 1915–31 March 1916, estimating sales of US securities in the period at £2 million per week, from purchases from the public and private sources. But even that would not be enough. That was despite some £30 million of gold from Russia which would be becoming available as well as a further £20 million of securities which might become available. Keynes calculated that would still leave Britain £100 million short of what it needed to finance its purchases in North America.[77] Burk records tensions between Lloyd George, in his capacity as Minister of Munitions and Reginald McKenna, then Chancellor, over war spending. In May 1916, McKenna presented the Cabinet with a paper on Britain’s financial liabilities in the US, calculating that by 30 September 1916, Britain had to find $434 million to pay for American purchases.[78]

Purchases of dollar securities were discontinued in March 1916, but the borrowing scheme continued to operate until 12 August 1916, when, because it was producing too few dollar securities, it was replaced by ‘Scheme B’. Unlike Scheme A, Scheme B

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[74] TNA, T170/84, Memorandum, 6 January 1916, initialled ‘J.B.’

[75] BoEA, C91/1, Memorandum,15 December 1915.

[76] Morgan, *Studies in British Financial Policy,* 327.

[77] TNA, T170/85 memo from J.M. Keynes, n.d., ‘Balance Sheet between the United Kingdom and North America, 1 October 1915 to 31 March, 1916.

[78] Burk, *Britain, America and the Sinews of War,* 78.

eventually sought to borrow or buy Canadian securities as well as those denominated in the currencies of various neutral states. Scheme B carried a tax penalty for those who owned securities but refused to surrender them. In August 1916, the Treasury circulated a letter to the insurance industry on the new Scheme B, saying that the magnitude of its American requirements had made it necessary to expand its non-sterling securities purchases.[79]

However, the London Exchange Committee (LEC), the second non-governmental body formed to further war aims in the capital market, was concerned that even the new scheme would be inadequate. It wrote to the Treasury Secretary on 2 August 1916 urging haste. 'The London Exchange Committee have had under earnest consideration the necessity for the provision of further Securities to be used in support of the borrowing operations' the LEC wrote, adding that it was additionally 'urging the mobilization of securities of neutral countries … The Committee believe there must be no further delay.'[80] Little over a month later, Bank of England Governor Walter Cunliffe, acting in his role as Chairman of the LEC, wrote directly to the Chancellor asking when Scheme B would be forthcoming, and urging that tax penalties be levied on investors who refused to loan or sell their securities. Other LEC members, he wrote, 'expressed the strong opinion that the Securities in question will not be forthcoming in sufficient volume to meet the needs of the present critical situation unless they are subjected to an additional tax like that imposed on the American securities. The committee therefore want me to emphasize the need to hurry and impose this tax on the new scheme…'[81] Days later, Cunliffe wrote again, expressing alarm at word that the Treasury might place a limit on the value of securities purchased, and urged that no such ceiling be imposed.[82] Soon after, Cunliffe wrote yet again, saying the LEC had learned that there remained insufficient time to get legislation through Parliament extending Scheme B to the securities of other neutral

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[79] TNA, T1/11889, Order, dated 14 August 1916.

[80] BoEA, C91/4 Letter to Treasury Secretary from Mahon, C., 2 August 1916

[81] BoEA, C91/4, Letter to Chancellor, from Cunliffe, W., 11 August 1916

[82] BoEA, C91/4 Letter to Chancellor, from Cunliffe, W., 16 August 1916

states, and urging the Chancellor to make a statement in the House committing himself to seeking compulsory powers.[83]

The purchases and borrowings of US dollar-denominated securities, while nominally aimed at supporting sterling against the dollar, had an important spill over effect: they boosted prices in Britain's home securities market. Investors, who were already in the habit of buying tradeable securities denominated in US dollars, used their payments to recycle these into sterling-denominated securities. Indeed, *The Globe* mourned that the funds being poured into the market were not being used for war; they simply meant higher prices all around, particularly for short-dated instruments. Money was also being poured into UK railway stocks, industrials and shipping issues.[84] Even if government coffers were not the direct beneficiary of the higher securities prices, the market moves kept a lid on interest rates. Had securities prices fallen significantly, there was a risk that investors would begin to clamour for a new, more attractive, War Loan. But the bankers, insurers and financiers on the LEC and Cornhill Committees, with the apparent support of the Bank of England, were looking by this time at a scheme of their own to stabilise the sterling/US dollar exchange rate by refusing to ship gold held in the US to any other neutral country.[85] Alternatively, they sought to dissuade insurers from selling policies on gold shipments between neutral nations. This was not out of fear that gold would fall into the hands of enemy states; rather, it was aimed at inflating the US money supply so that interest rates, and the dollar, would weaken. Sir Gordon Nairne, chief cashier to the Bank of England, wrote to the Treasury in late November to explain the strategy. 'Sir –' Sir Gordon wrote, 'I am directed by the Governors to refer to the persistent efforts which the Bank of England, acting on behalf of His Majesty's Government, are making to keep the United States of America as full of Gold that money there will be very cheap,' Sir

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[83] BoEA, C91/6, Letter, to Chancellor, from Cunliffe, W., 18 August 1916

[84] No Author, 'In the City: The Revival in Investment Securities: Government and Zinc', *The Globe*, 12 June 1916

[85] Lambert, *Planning Armegeddon*, 357. The Cornhill Committee was a private sector body made up of representatives of banking, insurance and shipping interests and set up to monitor City activities. It is in the same category as the London Exchange Committee.

Gordon wrote. 'With a view to this end, it is essential that, as far as possible, Gold should be prevented from leaving the United States: as their lordships are aware steps have, indeed, been taken with the object of stopping, or at least decreasing, the export of Gold from New York to Spain.'[86]

It was not the first time the Treasury had heard a suggestion about gold shipments. Indeed, it had been informed of a plan aimed at discouraging shipping companies from transporting gold and had discouraged it on earlier occasions. The Treasury wrote to the LEC in late October 1916, telling the group that, after careful consideration of the suggestion, 'Their Lordships do not consider it expedient to address the Shipping Companies as suggested.'[87] Britain's own position against the US continued to worsen. A UK government report on 24 October 1916 suggested that without new dollar financing, the country was about a fortnight away from insolvency.[88] Britain, acting through Morgan's, proposed to meet its immediate financing needs through an issue of short-term, unsecured Treasury bills to be sold in the US.[89] But then another event, even more troubling than the sliding sterling exchange rate, emerged – this one from official quarters. The newly formed Federal Reserve Board in Washington dealt a significant blow to Britain's plan; a memo to member banks warned them that purchases of short-term foreign allied securities might well leave them with liquidity problems. This made it impossible to raise dollars in the US, the LEC concluded, and warned that 'until the situation improved, it was essential that every measure should be used to tide over the interval in order to meet the accruing obligations' in the US.[90] By mid-December, the LEC viewed the situation with some panic. Cunliffe, as LEC Chairman, wrote to the Chancellor, telling him that 'We see no alternative but for the government to cancel, as far as possible, all orders, whether for warlike material or supplies such as sugar, and to

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[86] BoEA, File C91/4, Letter, Nairne, G., to Treasury, 23 November 1916.

[87] BoEA, File C91/4, letter, from R. Chalmers, to LEC, 26 October 1916.

[88] Kathleen Burk, 'The diplomacy of finance: British financial missions to the United States 1914–1918', *The Historical Journal,* 22.2 (1979): 351–72

[89] Burk, *Britain, America and the Sinews of War,* 83.

[90] BoEA, File C91/7, Letter to R. Chalmers, from LEC, 1 December 1916

restrict within the narrowest limits, all future commitments of any nature.'[91] Wilson himself, hoping to boost his stature within the US by presenting himself as a mediator able to end the war, urged the Board to make the message to the banks even tougher.[92]

One sticking point for the Americans was the fact that Britain was using borrowed funds not only to purchase US goods, but also to support the sterling/dollar exchange rate. Britain let America know that the absolute amount it needed to borrow each month depended on that exchange rate. For their part, the Americans viewed British attachment to the $4.76 sterling exchange rate as 'sentimental' and questioned whether maintaining it was a legitimate 'war purpose'.[93] That battle over Britain's efforts to maintain the sterling/dollar exchange rate would continue well into 1917, even after the US had declared war on Germany. Slippage in the sterling/US dollar exchange rate implied even higher costs for the Allies at a time when Britain was already struggling both on the battlefield and in the capital markets. US President Woodrow Wilson was agitating for new peace moves. This led Lloyd George, to counter that far from ending the war, the Allies would fight until they had delivered the knockout blow.[94] When the Asquith government fell in December 1916 and a new coalition formed with David Lloyd George at its head, the Chancellor, Andrew Bonar Law, made the raising of a new loan his first mission. It was against this backdrop of growing desperation about its ability to continue to finance war that Britain once again sought to tap its investors. That gnawing need for capital – required if Britain and its allies were going to be able to fight on to achieve a surrender of the Central Powers on their own terms rather than on those dictated by America – set the stage for the single largest capital-raising exercise of the entire war.

[91] BoEA, C91/7, Letter to Chancellor from Cunliffe, 14 December 1916.

[92] Burk, "The diplomacy of finance": 369.

[93] Burk, 'The diplomacy of finance', 362.

[94] Burk, 'The diplomacy of finance', 354–6.

The third battle front: inducing investors to loan their capital to the war effort

At the outbreak of the First World War, Britain was the wealthiest of the combatants, and, barring the United States, had the highest national income per capita in the world.[95] Although borrowing capital should have been simpler in Britain than in any other country, the battle to persuade, entice, encourage or induce Britons to part with their cash, was fraught all the way through. This section will describe the steps that Britain went through to raise the funds needed to see itself and its allies outlast the Central Powers. Much of the material is contained in contemporary accounts such as that of Wormell and Adrian Gregory.[96] However, I also draw on contemporaneous news accounts of the forces at work also competing for savers' capital. This section will be structured as follows: first, I will outline the initial effort at capital-raising, which proved a failure. Second, I will describe the effort to reach further down the income and wealth ladder to encourage the savings from those whose lending capacity was believed negligible. This effort was accompanied by a shift in the focus of fund-raising raising efforts from simple 'save more today' projects to a concerted campaign to simply spend less. The significance of this was that these efforts required the creation of an infrastructure for saving and collecting funds that involved a wide group of formal and informal institutions and a fully-fledged advertising campaign. By the time the need for capital became most pressing in early 1917, this infrastructure was in place and was ultimately used for the single largest capital-raising exercise of the war. I will also outline the official recognition that runaway profits were politically destabilizing and the belated recognition that distortions in Britain's economy needed to be addressed. This is significant because, as will be seen from the sampling exercise, I will show evidence that a significant portion of outsized profits from key industries were eventually recycled into War Loan. And finally, I will outline the strenuous efforts that Treasury undertook to ensure that its financial institutions – banks and insurance companies – contributed a minimum amount of capital, despite their apparent reluctance to participate. In this instance, there is evidence that in

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[95] Crafts, *Forging Ahead, Falling Behind*, 2.

[96] Adrian Gregory, *The Last Great War: British society and the First World War* (Cambridge: Cambridge University Press, 2008).

private conversations with bankers and insurers, Treasury officials threatened confiscation of assets if insufficient funds were raised from British financial institutions. Minimum thresholds were set at £620 million for the banks and £100 million for the insurance companies.[97]

Patriotism fell far short of what was needed to sell the loan. The 3½% War Loan 1925–8, ‘acted like a sledgehammer’, according to Wormell.[98] The ledgers show that only 97,635 investors signed up to buy bonds, fewer than 10 per cent of the pool of one million potential investors estimated by Ranald Michie to exist in Britain at the time.[99] Only £91.1 million of securities were sold. However, the public could be forgiven for believing that the first War Loan was an unbridled success, given the overwhelmingly positive press coverage. The *Financial Times*, for example, reported on 23 November 1914, that the Loan had been oversubscribed by £250,000,000. ‘And still the applications are pouring in,’ it gushed. In truth, a further £113,525,900, had to be subscribed for by the Bank of England, this being the alternative to a damaging admission that the public simply did not want to buy the stock. Such an admission likely would have caused the price of those War Loans that government did manage to sell to plummet and raised the interest rate of every succeeding loan needed to finance the war. To hide the failure, Chief Cashier, Sir Gordon Nairne, and Deputy Chief Cashier, Ernest Harvey tweaked the Bank’s balance sheet so that the purchases were listed as ‘Other Securities’, rather than ‘Government Securities’.[100] Disclosure of the failed fund-raising would have been ‘disastrous’ in the words of John Osborne, a part-time secretary to Governor Montagu Norman, in a history of the war years written in 1926. Copies of this account were only given to the Bank’s top three officials and it was decades before the full version emerged. Revealing the truth would doubtless have led to the collapse of all outstanding War Loan

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[97] TNA T172/746, Summary of Meeting between Chancellor, Treasury Committee of London Clearing Bankers, 3 January 1917.

[98] Wormell, *The Management of the National Debt,* 65.

[99] Ranald C. Michie, *The London Stock Exchange: A History* (Oxford: Oxford University Press, 1999), 91.

[100] BoEA, M7/156, 382–386.

prices, endangering any future capital-raising. Apart from the need to plug the funding shortfall, any failure would have been a propaganda coup for Germany.

However, it was clear that a small number of top officials at the Treasury also knew of the failure. John Maynard Keynes, in a 1915 memo to Bradbury, stamped ‘Secret’, praised the ‘masterful manipulation’ of the Bank’s balance sheet as a means of hiding what would have been a damning admission of failure. But he also warned that Bank financing of the war should not be allowed to go on and that funds must be found elsewhere.[101] By June 1915, Bradbury was warning that the method that Britain was using to raise finance, that of issuing short-term Treasury bills, was inflationary, and that long-term finance needed to be put in place. In a memo, Bradbury began to describe the outline of what would become the 4½% War Loan 1925–45, into which the 3½% War Loan would become convertible.[102]

The failure of the financing hung over the style and design of all future war loans. Never again would there be a public announcement of a target for a financing exercise. Over the course of the war, terms became increasingly generous with higher interest rates, sale prices below par value and tax advantages that undermined more than a century of revenue collection principles. But even with the lessons learned from the failure, there are signs that the Bank remained troubled by it. On 21 February 1918, for example, Governor Walter Cunliffe wrote to the then Chancellor Andrew Bonar Law saying that although he is convinced the purchase of the 3½% War Loan and its subsequent disguise in the Bank’s balance sheet were not *ultra vires,* he still wished to be indemnified for the actions.[103] The issue was raised a month later at a Bank of England board meeting, where

[101] TNA, T170/72, Memorandum, Headed ‘Secret ‘The Bank of England in relation to Government borrowing and the necessity of a public loan’, from Keynes, J.M., 14 May 1915, War Loan’ ‘Confidential’, initials J.B., 7 June 1915, 1–2.

[102] TNA, T170/72, Memorandum, Marked ‘Confidential’, ‘War Loan’, initials J.B., 7 June 1915.

[103] BoEA, C40/615, Letter, W. Cunliffe to Bonar Law, 21 February 1918.

members discussed an indemnity, but were reassured that the alternative to the subterfuge would have been far worse for the nation.

A memo from Bradbury in 1915 set out the structure and rationale for the second War Loan, asking, among other questions, whether there should be coupon payments exempt from tax. Bradbury argued against this on grounds that it benefited the wealthy more than the working classes, destroying the 'popular character' of the loan. He also argued in favour of a loan with a maturity date, unlike annuities issued for previous wars. That was because rising inflation rates of the previous 17 years had destroyed the capital value of earlier issues. Those selling these securities in the secondary market received much less than the *100d* per £1 face value.[104] The face value of fixed annuities had fallen by around something like 40 per cent. 'It may be absolutely necessary to undertake a similar obligation in regard to the new loan, but it is not an obligation to be undertaken with a light heart,' Bradbury wrote in a memo. He also argued for making older issues of government stock convertible into the new loan on the grounds that it was one way to mobilize capital that was lying unused because securities were unsaleable.[105] In thinking about the new loan, Treasury officials reconsidered a key feature of the first loan. It had only been available in minimum denominations of £100, restricting its appeal to those with that level of liquid savings. The reasons outlined in an August 1914 report to the Treasury from the National Debt Office, are, first, that an effort to appeal to 'small savers' with a security during the *Boer War* had been unsuccessful with minimum denominations set at *100d*. Moreover, the memo argued, small savers who did want to invest would withdraw funds from Post Office Savings Banks where interest was capped at 2½ per cent. Treasury would be paying more for its own money, and one objective of the first War Loan was that it should be as favourable as possible to the taxpayer. 'On the

[104] Bond yields and bond prices move inversely to each other. When new securities with higher coupons are issued, prices on existing securities carrying lower interest rates are marked down to a level at which their effective yield will equal that of the new debt. Those holding older securities take a loss in capital value.
[105] TNA, T170/72, Memo, Headed: 'War Loan' and 'Confidential', 7 June 1915.

whole, it will probably be thought that a new loan is not the occasion on which the very small investor should be canvassed,' the memo concluded.[106]

In designing its second loan, the Treasury incorporated two new features; first, it allowed conversion into the new loan by those holding older government securities – including the 3½% War Loan – as well as 2½% Consolidated Annuities, known colloquially as 'Consols'. These were effectively unsaleable because the price investors were willing to pay for them was even below the minimum price set by the Stock Exchange in the aftermath of its closure amid market mayhem in August 1914. McKenna also vowed to include in any further financing the ability to convert the new securities currently on offer into a new and even more attractive one should it be offered later.[107] The ramifications of the conversion features were to haunt the Exchequer well into the interwar years as investors pressed to see convertibility become part of every security issued in connection with war. It did not take long for investors to understand the value of the conversion features and they quickly moved to price them. The 3½% War Loan fell to just below *93d* per £1 of face value by early July, days after the new loan was announced. In fact, the gap between prices for old and new War Loan meant it was no longer worthwhile to continue converting illiquid Consols; so long as the 3½% War Loan stayed below *94d* per £1 face value, it could be converted into the 4½% War Loan at *97.75d* per £1 of the new loan which was officially on sale at *100d* in the £1.[108].

The second new feature of the second War Loan was the abandonment of the Treasury's desire to exclude small savers and members of the working classes. As word of the new loan spread, it became apparent that many so-called small savers were those with more than just a few pounds in the nation's Savings Banks. These began to see a deposit outflow. A facility for small investors paying in lots of as small as £5 each was created in

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[106] TNA T170/31 Report, From: National Debt Office, initialled W.G. Turpin, to Treasury, August 1914.

[107] Wormell, *The Management of the National Debt, 112.*

[108] No Author, The Stock Exchange and the War Loan, *The Economist*, Week of 10 July 1915, 51.

June, with the facility to be closed as of 10 July, extended to 31 July.[109] On 24 June, G. Davies of the Savings Bank Association, wrote to S.D. Waley at the Treasury that, already, £641,400 had come out of savings bank accounts and was likely destined for War Loan purchases. 'Savings Bank withdrawal warrants have been issued for about £2,000,000 which will probably come back next week in the form of subscriptions in the Loan,' Davies wrote.[110] Nor were the withdrawals necessarily small. By 4 July 1915, £701,000 of £5,913,000 were for sums of £105 or above.[111] By 30 July 1915, the sum was £22,706,000.[112] As of 10 August, the date of the closing of the list of subscriptions to War Loan at Post Offices, 969,000 subscriptions totalling £36,965,000 had been received, and that did not include Post Office subscriptions made through banks. Davies wrote that despite the official closure of the list 'applications from Employers, Soldiers and Sailors are still coming in.'[113] If Treasury officials needed a signal that much more capital could be harnessed for war if returns were sufficiently attractive, this was it.

In July 1915, the Treasury had been considering mechanisms to capture the capital of 'small savers' and created a committee which was reconstituted in September.[114] An initial scheme was put in place allowing purchase of certificates of 15s 6d which, in five years' time, would rise to £1 in value. It amounted to a return of 5 per cent. However, there were penalties for early withdrawal; those cashing in certificates after two years would receive compounded interest equivalent to only 3½%.[115] By November 1915, Chancellor McKenna accepted that there was a need to consider a more efficient mechanism to capture the savings of the working classes. He retained Hedley Le Bas of the Caxton Advertising Agency, who had previously been engaged to promote army

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[109] Wormell, *Management of the National Debt,* 112–113.

[110] TNA, T170/70, letter, to S.D. Waley from Davies, 24 June 1915.

[111] Ibid, letter to S.D. Waley from Davies, 4 July 1915.

[112] Ibid, letter to S.D. Waley from Davies, 20 July 1915.

[113] Ibid, letter to S.D. Waley from Davies, 10 August 1916.

[114] Wormell *Management of the National Debt,* 114.

[115] TNA, T170/75, Report, 'Rights of Subscribers Through the Post Office to the Conversion of Existing Government Stock', Appendix, 6.

recruitment, to do similar work on behalf of working-class savers. ‘We must give the investor something for nothing to make him lend his money to the country. In other words, why not make patriotism profitable?’[116] McKenna also wrote to Bradley, confirming that he would put together a committee to consider raising a War Loan ‘in small denominations and the best methods of ensuring its success among the working-classes,’ appointing Sir Edwin Montagu, a Liberal Peer, as chairman.[117] Its final report recommended a scheme with three main characteristics: first, that the capital invested would not lose value. The Committee had found great bitterness among investors in Consols, Irish Land Stock and Local Loans, all of which were trading below par. Second, savers needed to be able to withdraw funds on call to meet the uncertainties of working-class life such as illness and unemployment. Third, the rate of return must equal that offered to wealthy investors. The object of the scheme for small savers was twofold, the first of which was the obvious goal of raising capital for war. But the second was to persuade the general public that even if wages were rising, money should be saved and not spent.

There was a need to channel all the nation’s resources into fighting a war, and that at a time of full employment and rising wages, spending on pleasures and luxuries undermined the war effort. Indeed, in setting out the objectives that a scheme for small savers ought to achieve, the report noted that the goal of cutting consumption was at least as important as that of collecting savings.[118] Anecdotal evidence of the inducements to splurge that higher wages gave to those long starved of consumer goods abounds. *The Economist*, noting the fortunes of what it called ‘stores’ selling ladies apparel and draperies, pointed to what it described as ‘a certain redistribution of wealth’. Nor did it restrain itself from a bit of class condescension. ‘In the ignorance of how to spend wisely, bred by conditions of *industrial* life, and the desire to have a good time while they may’

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[116] Strachan, *Financing the First World War,* 148.

[117] TNA, T170/75, letter, R. McKenna to J. Bradbury, 20 November 1915.

[118] TNA, T1/11898, File headed ‘Committee on War Loans for the Small Investor’ Report of Committee on War Loans for the Small Investor, Draft Report, 1, Issued 1 January 1916.

women appeared to be splashing out. ‘Much of that money is going into cheap finery and an aping of the foolish extravagances of the classes above them,’ the magazine sniffed.[119] Men, too spent their rising wages; Guinness and Co, after three years of stagnating profits, produced annual accounts which ‘show an advance that can only be described as enormous’, *The Economist* concluded in 1915. ‘The directors make no comment upon it but it must be evident that war has not had the effect of reducing either the consumption of stout or the profitableness of its manufacture.’[120] Indeed, in early 1916, a Hastings-based boot retailer, Geo. H. Hall & Son, sought to use the rumours of compelled savings that ran throughout the war as a sales tool even as the nation’s newspapers recorded Chancellor Reginald McKenna’s repeated denials of government intentions. ‘Compulsory Loan or Heavy Taxation May be introduced shortly’, the advertisement read. ‘Our Bargain Sale of Boots and Shoes is your opportunity to save while you can.’[121]

As demonstrated by the boot retailer’s sales pitch, the impulse to spend among the working and middle classes had to be counteracted by a stream of constant advertising and propaganda. David Glampin’s study of pre- and wartime advertising noted that even before the outbreak of war, the promotion of goods was more closely linked to emotional appeals rather than the practical sales pitches that had prevailed previously. Indeed, such emotional pitches were used to recruit voluntary enlistments in the first year of war. Demand for news from the war front led to a surge in newspaper readership, offering new platforms for those seeking to sell goods and services.[122] Even when local businesses were nominally part of that sales pitch to save, some could not resist the urge to promote sales of their own goods or their own brand, at the same time. In an advertisement in December 1917, for example, the Derby-based retailer of furniture, Edward Davies, offered a £2 War Savings Certificate to every customer buying furniture valued at £5 at

[119] No Author, ‘London Stores Profits’, *The Economist*, Week of 3 June 1916, 1056.

[120] No Author, ‘Guinness and Company’s Report’, The Economist, Week of 7 August 1915, 217.

[121] Geo. H. Hall & Co, advert, *Bexhill-on-Sea Observer*, 5 February 1916.

[122] David Clampin, ‘British Library: World War One’, 22 March 2013, https://www.bl.uk/world-war-one/articles/commercial-advertising-as-propaganda (accessed 17 September 2019).

any of its six shops. Those spending £500 could get Certificates valued at £100.[123] Businesses urging purchases of War Loan also had an opportunity to boost their brand by aligning themselves with patriotic efforts. In an emotional pitch to readers of the *Birmingham Daily Gazette*, Lewis's Ltd, a retailer, ran an advertisement under the headline: 'Your Money or Your Life'. The advertisement emphasised that while life was priceless, money was not and indeed, strong profits could be earned through purchase of War Loan and War Savings Certificates. It took the opportunity to boost Lewis's brand value through its association with patriotism. A note at the bottom read: 'This appeal is issued by Lewis's Ltd of Liverpool, Manchester and Birmingham at the special request of the government and is inserted at Lewis's expense.'[124]

Not surprisingly, then, the report on small savers recommended that an Executive Committee be appointed to undertake the advertising of War Loan and War Savings Certificates. It was also intended to promote the formation of local agencies and associations, and to assist and supervise them as needed. Associations supporting small savers were also formed in cooperation with employers. The accounts of small savers were held in Post Office and Savings Bank registers and for the purposes of this research, are not included in the sampling exercise.

Nevertheless, the drive to sell War Loan to the working classes was important for two other reasons: first, it was launched with a scheme to finance and organize publicity for raising capital for War Loans in communities around Britain, enlisting the support of large employers, trade unions, friendly societies and charities. This would create both a mechanism to mobilize capital as well as a drumbeat of patriotism for investment in War Loan generally. Its second objective, as the Small Investor Committee had urged, was that of discouraging consumption for all but the most necessary purchases. Local officials were enlisted in the delivery of patriotic speeches lauding the abstention from enjoyable

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[123] Advertisement, 'Christmas Gifts: National War Bonds and War Savings Certificates GIVEN AWAY', *Derby Daily Telegraph*, 14 December 1917, 1.

[124] Advertisement, 'Your Money or Your Life', *Birmingham Daily Gazette*, 3 December 1917, 2.

purchases in favour of War Loan savings. In a speech drafted for an unnamed official in 1915 in support of Queen Mary's Munitions Fund initiated by, as the speaker explains, 'Her Gracious Majesty' – listeners are urged to take a pledge. 'We ask you to go further to take this Pledge – 'I promise to endeavour to refrain from luxuries during the period of the War and to invest the savings in Queen Mary's Munitions Fund … So instead of buying a new hat, you buy a new shell'.[125]

Contemporaneous accounts from newspapers point to a form of cheerleading in support of War Loan generally which bolstered enthusiasm for lending. 'This is War Savings Week, when it behoves every patriotic Briton to make a beginning, if he has not already done so, in the exercise of the most rigid economy, for the purpose of lending to his country the financial aid upon which, equally with our military strength, the completeness of the ultimate victory depends,' the *Leeds Mercury* trumpeted in July 1916 as the campaign for small savers rolled out. It noted that 'more than thirty thousand churches and chapels in London and the provinces' were engaged in promoting the scheme.[126] Vigorous fund-raising was recounted as a source of local pride, 'War Savings Boom: Over Four Hundred New Associations Last Week', announced the *Sheffield Daily Telegraph*. 'It has transpired that the War Savings Association in connection with one large London firm embraces the entire clerical staff, the lift girl and the charwoman who would clean the premises at night,' it added, underscoring the egalitarian nature of war savings.[127] Moreover, it offered a mechanism for employers to become foot soldiers in the battle for capital. Even before the formal enlistment of businesses as conduits for the savings of their employees, several had leapt at the opportunity. One firm in Dublin offered to buy, on behalf of any member of its staff, War Loan bonds to the value of £5, £10, £15 or £20. The firm put its own capital up front to pay for the securities and

[125] TNA T172/712 Text of a Speech on behalf of Queen Mary's Munitions Fund , n.d. no signature, 1–5.
[126] No Author, 'War Savings Week Inaugurated', *The Leeds Mercury,* 17 July 1916, 3.
[127] No Author, 'War Savings Boom: Over Four Hundred New Associations Last Week', *Sheffield Daily Telegraph,* 12 September 1916, 6.

allowed workers to repay in monthly instalments of at least 1s per week. But workers would receive full interest on their bonds.[128]

In between launch of the 4½% War Loan and the 5% War Loan 1929–47, several Exchequer bonds were issued. In September 1916, as Britain's currency woes mounted, it offered a three-year Exchequer bond at six per cent prompting criticism even from *The Economist,* an investor-friendly publication. It described the issue as 'a totally unnecessary movement in the wrong direction' and said that offering such rates might make it politically expedient for government to consider conscription of capital in the way that it had agreed to conscription of men's lives.[129] The evolution of an organizing and promotional effort to attract the savings of working-class investors proved important when it became time for the single largest capital raising exercise of the war: the launch of the 5% War Loan 1929–47 in January 1917. By that date, there were already mechanisms in place to gather investor cash and a propaganda machine at work, telling investors why they needed to loan money for the war effort. In January 1917, as the next War Loan was launched, the *Birmingham Daily Post* reported speeches by Arthur Henderson, local Member of Parliament, urging the public to buy stock. 'Mr Henderson said there were three factors essential to bringing the war to a final and satisfactory conclusion – men, munitions, money – and in many respects the last named had become all-important,' the paper noted. The use of oratory, propaganda and the massive advertising campaign, even if initially aimed at the small investor, could not have escaped the attention of those with the most capital to invest and impress upon the population generally the role capital would play in ending the war. The newspaper offered to publish the names of the largest local investors, implying that such investment was a patriotic and selfless activity. It printed a list of those who had already made large purchases which included Norwich Union Life Insurance Society which had invested £1.2 million in 'new money' in War Loan, the Fine Cotton Spinners Co Ltd of Manchester (£500,000), and Mr Joseph Rockford, who had invested £75,000 in the new

[128] No Author, 'War Loan', *The Economist*, Week of 7 August 1915, 220.

[129] No Author, *The Economist*, Issue of 30 September 1916, 555.

War Loan.[130] Moreover, there was evidence up and down Britain that the general public understood the centrality of capital to a successful end to the war. The Arbroath Herald, for example, records an exhortation from a local bailli in January 1917 to expand the town's own purchase of the new War Loan. Bailie D.T. Wilson told fellow councillors that the town had been told "that the more money they got the nearer would they get to the end of the conflict. They were told it was a war of exhaustion."[131]

With the formation of the new government, Chancellor Bonar Law was well-informed about the struggle for capital that was manifest in Britain's efforts to cover its war-related purchases in the US and its need to raise capital at home. Unlike the discussions that preceded the issuance of the first two War Loans, Bonar Law held successive meetings with the most significant providers of capital – the clearing banks and the insurance companies – over the design of the new securities, their features and the benefits that the new government was prepared to offer to ensure the highest-possible take up. Records of those meetings, which stretched from late December 1916 into February 1917, show that bankers pressed hard for generous terms for lenders, including significant tax exemptions.

The minutes also suggest that the ghost of the failed 1914 fund-raising hung over government ministers. For their part, banks may have achieved generous terms because Britain had too much at risk if insufficient capital was raised. It was at a meeting between the Chancellor and the bankers on 3 January 1917 that the Chancellor chose to make his threat about seizing capital. 'In the course of the discussion on this point, the Chancellor emphasized that it was necessary to take risks, as he considered that the greatest catastrophe of all would be that the loan should be a failure and if necessary in the last resort, he would have to ask for a contribution from the Banks according to the extent of

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[130] No Author, 'Mr Henderson and the Allies Task: Men, Money and Munitions Needed for Success', *Birmingham Evening Post*, Tuesday 30 January 1917.

[131] No Author, 'Town Council and £15,000 War Loan', Arbroath Herald, Friday 16 February 1917.

their deposits. He pointed this out in order to show how essential it was that slight risks should run in order to make the loan a success.' At that meeting, the Chancellor sought a commitment that bankers would convert a set percentage of their Treasury bills, prompting a discussion of whether the Bank of England would commit to loaning funds to them to assist their own customers in paying for new loans. At an earlier private meeting of the bankers themselves held on 8 January, they agreed they would insist that advances be made to them to allow this, and that funds should be made available to approved borrowers at 1 per cent under the bank rate.[132] Sir Edward Holden, Chairman of London, City and Midland Bank, pressed for tax exemptions and averred that no new money would flow into the Exchequer unless the new securities carried a coupon of 4½% with interest to be tax-free. At subsequent meetings, Treasury officials pushed back, concerned about the message such exemptions sent to the working classes generally. Sir Felix Schuster, Governor of the Union Bank of London, suggested describing the tax-free issue as 'tax compounded' to avoid the stigma. Among other points, Bonar Law argued that the timing for a new and very large loan had arrived. For one thing, the stature of the newly formed government was higher than that of the one which had just fallen, at least so far as the City was concerned. Moreover, recent peace overtures from Germany made the current moment a very favourable one to bring out a new loan. The talks about the terms and conditions of the new loans took place over weeks, with the Exchequer pushing for two concessions; first, it wanted the banks to hold on to the paper they bought until after the war ended, and second, that they would make finance available to customers to help them buy War Loan in instalments. Ultimately, what emerged was the 5% War Loan 1929–47, priced at *95d* for each £1 face value and previous issues of Exchequer and 4½% War Loans would be convertible into it. Officially, the new loans were launched 11 January 1917.[133] To satisfy demand for a tax-exempt security, a separate, 'tax-compounded' 4% War Loan 1929–45 was issued. While there were 1.05

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[132] TNA T172/746, Summary of Meeting between Chancellor, Treasury Committee of London Clearing Bankers, 3 January 1917. TNA T172/747, Memo, summary of meeting between Treasury officials and insurance industry representatives, 2 February 1917.

[133] Wormell, *Management of the National Debt*, 324.

million subscribers for the 5% War Loan in 1917, there were 25,000 for the 4% War Loan.[134]

The discussions were held against the backdrop of an increasingly dire financial picture with the shortage of capital and a worsening crisis in the sterling exchange rate overhanging the deliberations. After the initial launch, sales of new War Loan appeared to falter in late January 1917.[135] During a meeting between Exchequer officials, clearing bankers and the Governor of the Bank of England on 2 February 1917, Bonar Law warned bankers that a bare minimum of £620 million had to be raised, and that if he did not get it, he would seize it from them. To soften the blow, he suggested that these compulsory contributions might be paid for not with War Loan but with a short-dated security. The banks then asked what would happen if a few of them did not 'do their duty.' The Chancellor said that if that were the case, he would publish the names of the offenders in the House of Commons. Bonar Law told the bankers that the sum had to be larger than that raised for the 4½% War Loan because of the propaganda impact the new capital raising would have.[136] The Bankers' Clearing House, on behalf of its members, subsequently wrote to the Chancellor confirming that if the minimum of £620 million in desired subscriptions could not be raised, they collectively would pledge an additional £150 million of their own for the new War Loan.[137]

The minutes do not record the reason for the Chancellor's sense of urgency about the need for a large loan. But they note that the Chancellor told the bankers that 'it was of the utmost importance in the national interest that the total obtained should exceed that of the 4½% loan. Germany was watching the financial situation of this country and would welcome any sign that our staying power was beginning to fail.' However, files indicate

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[134] Wormell, *Management of the National Debt*, 340.

[135] Wormell, *Management of the National Debt*, 330.

[136] TNA T172/746, Memo summarizing meeting between Chancellor, Treasury officials, banks, 2 February 1917.

[137] TNA 172/746, Letter, stationery 'The Bankers Clearing House' to Horace Hamilton, secretary to the Chancellor, 9 February 1917.

that a year earlier, Britain's Treasury had received military intelligence about the Kaiser's view of British finances through a well-placed Switzerland informant. 'You may be interested to learn the Kaiser's opinion about England. Curiously enough, he has a very poor opinion of the financial capacity of Great Britain. He told a gentleman of my acquaintance, who had been invited to dine with him, that he was convinced that England could not bear very much longer the financial burden of the war.'[138] Even without the propaganda backdrop for the fund-raising, there were very pressing reasons why capital was the top priority. Among these was a fear of French surrender.

The Chancellor also held a series of similar meetings with representatives of Britain's insurance companies, the first of which was on 5 January 1917. Bonar Law told the insurers that he expected them to invest a total of £100 million in the new War Loan through a combination of £50 million in fresh cash and conversions of existing securities. He also set out the percentage of assets under their management they should pledge for the purpose of the new War Loan, the percentage of future surplus they should pledge for War Loan investment, and the amount of new cash they should be offering. The insurers, who had already cooperated in surrendering their dollar-denominated securities at a premium, hit back. They argued that they did business in foreign countries where regulations on insurance reserves made compliance with the Chancellor's request very difficult. Also, they complained that their fund-raising would be undermined by the fact that many held large sums in illiquid mortgages which could not be sold off quickly. As with the banks, the Chancellor told the insurers that if he did not get that sum, he was prepared to order compulsion rather than allow the new loan to fail.[139] At a subsequent meeting on 2 February 1917, the insurers challenged the Chancellor's fund-raising

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[138] TNA, T1/11892/65 File Headed 'Germany: Financial and Economic Condition, Revelation of Communication from Switzerland', Letter from unnamed informant forwarded to Mr Plender at Deloitte, Plender, Griffiths & Co, 20 October 1915.

[139] TNA, T172/747, Memo, summary of meeting between Bonar Law, Hardman Lever and John Bradbury will representatives of Alliance Assurance, Commercial Assurance, North British & Mercantile, Phoenix Assurance, Royal Exchange Assurance, Sun Assurance, 5 January 1917.

efforts, saying their industry was under pressure because the Treasury was unwilling to confront the banks with demands for direct subscriptions.[140]

Were the nation's insurers shirking their duty? They were the holders of the second largest pool of institutional capital in Britain and participants in an industry whose growth had been fuelled by a variety of tax breaks on contributions since the middle of the nineteenth century. At the end of 1916, just before the new War Loan effort, the insurance companies appeared to be the henchmen of wartime capital-raising. According to *The Economist.* 'What this has meant during the present war is indicated by the fact that war claims paid by the life offices have exceeded £7,500,000. They have invested in Government securities of various kinds upwards of £75,000,000. They have sold or lent to the Treasury under its schemes A and B securities of the face value of over £46,000,000. Before the Treasury schemes appeared, they had sold large blocks, about £20,000,000 of American securities, which effected the same purpose as the Treasury had in view, the maintenance of the rate of exchange.'[141]

After the proceeds of the 5% War Loan 1929–47 had been raised, Britain experienced continued need for further capital. At first, there was heavy borrowing through the Treasury Ways and Means Account and through Treasury bills. But by September 1917, the need for longer-dated paper was clear. The Treasury launched four separate series of National War bonds in October 1917, April 1918, October 1918 and February 1919 respectively. These were issued, like the Exchequer bonds, on tap; that is, only when investors expressed a wish to buy them.[142] The sales pitch for these, too, emphasised the 'value for money' attractions of the loan, along with the need to avoid unnecessary consumption. 'National War Bonds: offer a unique opportunity to the Investor' was the

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[140] TNA T172/747, Memo, summary of meeting between Treasury officials and insurance industry representatives, 2 February 1917.

[141] No Author, "Business Notes: The Mobilisation of Securities", *The Economist,* 23 December 1916: 1171–1173.

[142] Wormell, *The Management of the National Debt,357–364.*

heading on a flyer distributed for sales promotion.[143] The sale of these instruments got a boost when George Sutton, chairman of the Amalgamated Press, was appointed in November 1917 to head publicity and promotion of these new securities. He hit on the idea of promoting competition between local authorities and local savings associations to see who could raise the largest sums from the general public.[144]

Shortly after, Britain achieved a stunning military success that captured the imagination of a war-weary public; six British divisions, armed with a fleet of 476 tanks, broke through the German lines where stalemate had reigned for the previous three years.[145] Within days, the British forces were forced to retreat, but such was the reaction on the home front that church bells were rung out in joy.[146] This became the basis for the organisation of so-called Tank Days, occasions when a tank would be displayed in a town centre and local savings associations would urge investors to see the tank and buy a National War Bond with a maturity of up to 10 years or a War Savings Certificate. A Tank Timetable was created by 12 December 1917 – days after the battle and by which time British troops were retreating – that included capital-raisings in 18 British cities from Cardiff to Glasgow.[147] The effectiveness of these was compounded by the existence of local savings associations which had been in place for over a year.[148] The Tank Weeks were so successful that by January 1918, Sir Robert Chalmers, banker and Chairman of the National War Savings Committee, was notified of the intention to hold a series of Business Men's Weeks.[149] A further, undated memo set out how these were to be carried out, requiring that each bank in the town send a representative and specifying that

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[143] BoEA, AC30/57, Flyer for sale of National War Bonds, nd

[144] Wormell, *The Management of the National Debt, 368.*

[145] Stevenson, *With our Backs to the Wall*, 27.

[146] Commonwealth War Graves Commission, Battle of Cambrai, accessed 22 March 2019, https://www.cwgc.org/history-and-archives/first-world-war/campaigns/western-front/battle-of-cambrai

[147] BoEA, AC30/357, Document, Tank Timetable, 12 December 1917

[148] Gregory, *The Great War*,220.

[149] BoEA, AC30/357, Letter, to Sir Robert Kindersley, no signature, 21 January 1918.

commissions would be paid on all monies collected.[150] All in all, the National War bonds (NWBs) raised a further £1,674 million in capital for war, with the issue of September 1917 – the period in which Tank Weeks were launched – the single most successful. The NWBs were convertible into the 5% War Loan 1929–47, eventually helping to swell the size of that issue, even after securities were surrendered for estate duty.

Conclusion

Britain was the world's wealthiest nation at the outbreak of the First World War. It was also the world's single largest exporter of capital. However, simply being home to a vast pool of wealth was not enough to ensure that Britain could marshal capital for national purpose and harness it to the war effort. Indeed, some of Britain's structural strengths proved to be weaknesses when it came to particular 'fronts' in the battle for capital. On its very first 'front' – that of keeping capital out of the hands of citizens of the Central Powers, Germany in particular – the interdependent commercial and financial links between the two nations created myriad relationships which could be exploited outside government oversight through banks and financial institutions. Moreover, for all the government's sincere desire to cut Germany off from sources of capital, the trade with Germany was valuable to a swathe of British businesses. These had strong commercial incentives to find ways around official blockades of capital. Britain's philosophy and its commitment to free trade made it easier for capital to ebb into, and flow out of, what was the world's capital for global trade finance.

These characteristics made the battle on the second war front for capital equally difficult. As funds ebbed into, and flowed out of, Sterling, the ability to control the trading value of its currency was outside the scope of government. Britain had not entirely suspended conversions into gold as did Germany and France, but it is unlikely that any such moves would have enabled it to prop up the value of its currency to anything like the level versus the US dollar that would have enabled it to maintain the purchasing power it had held at the start of the war. Early steps to marshal capital took the form of limiting the

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150 BoEA AC30/357 Memo, n.d. no signature, Headed 'Business Men's Week'.

ability of non-domestic institutions to raise capital in London to prevent any further outflows of sterling. Later, investors holding dollar-denominated securities were asked to sell at a premium or lend that paper to the Treasury. When that proved insufficient, it threatened to penalise those who owned such securities and finally, issued an order to seize them. It softened the blow by compensating investors with sterling-denominated securities which could be traded and sold in the open market. But even that was insufficient. By the end of the war, government had been forced to call upon all of Britain's institutions – not just the formal channels of government agencies, law courts, Post Office Savings Banks, and local government – but all the private sector informal institutions as well. These included – on the front line – trade associations of banks, insurance companies and financial intermediaries. It was required to rely on employers and labour unions to be the foot soldiers, diverting some of the rising weekly wages of workers into War Loans and Certificates. It effectively co-opted the newspaper and advertising industries to spread its twin messages of both reducing consumption and increasing saving as weapons to be used for victory. Perhaps most important of all, it was forced to steadily increase the price it was prepared to pay for capital. It needed to tread a fine line between the official 'price tag' displayed on capital in the form of an annual interest rate and that of the informal price that came from special tax privileges, conversion rights and discounts in the prices at which securities were sold to the public. Tax privileges were especially problematic because they so obviously favoured the wealthy.

And finally, the marshalling and harnessing of capital for the war effort required the imposition of previously unthinkable levels of taxation, that not only reached further down the ladder of the working classes but also went much further up the income ladder of the wealthy. In the 'Battle for Capital', the fact that Britain's citizens had more of it than any other nation was simply not enough. Britain had to use all its efforts to force or persuade investors to loan it the capital for war. Prime Minister David Lloyd George, at the outbreak of war, would have had no clear idea of how much it would cost to wage a global war on an industrialised scale. The slogan 'Business as Usual' was quickly abandoned in mid-1915. As with other aspects of its economy, Britain had to intervene in the capital markets in previously unthinkable ways, as it was gradually forced to do in respect of labour, commodities, profits and prices. The ‘Battle for Capital’ was an essential element in the ultimate outcome of the First World War.

CHAPTER 3
Where did the Capital come from?
Investors in Unnamed Occupations

In this chapter, I will try to resolve the questions about the origins of the capital that investors used to purchase successive series of War Loan in the years 1914–1932. As the last chapter demonstrated, fantastic amounts of capital were raised at home to finance Britain and its allies to fight the First World War. I offer an analysis of the sources of individual investors' wealth, without which no investment in War Loan could have occurred. Understanding how investors were induced to place that capital in War Loan requires an understanding of how it was come by in the first place.

However, this chapter comes with a caveat: a very significant percentage of investors in the ledgers do not show a formal occupation in their entry. This chapter, the first of two which looks closely at investors' occupation, will look at that significant group. Although the practice of recording the occupation of each investor buying War Loan had been in place since the seventeenth century, by the outbreak of the First World War, significant gaps emerged that complicate the ability to accurately track the source of capital. This is particularly the case for retail investors – institutions usually give the source of their capital away in their name and location – and over the course of the years 1914–32, these investors fall into two broad categories. The first of these are women who are only identified in the ledgers by their relationship to a man: they are either married, widowed or spinsters (unmarried). The second category is that of men who, rather than name their specific occupation or profession, describe themselves as 'Gentleman', 'Esquire' or some other honorific. In the first sample, these two groups combined accounted for nearly three-quarters of all retail investors, 70 per cent in the second sample and 69 per cent of retail investors when measured by number in the third sample. Given the importance of these groups, I have divided my analysis of how investors acquired their capital over two chapters. In this, the first, I examine those with no stated occupation, looking at possible reasons why these trends emerge so sharply in the ledger samples in the years 1914–32, and considering explanations in the context of how the First World War altered Britain's economy, its social structure and its role at the centre of global trading. Because so many investors lack a formal description of their occupation, I have tried to match individual investors with their respective entries from the 1911 and earlier Census reports. I have also tracked details of their families from Census reports conducted before 1911 as well as from National Probate records to try to determine the likely source of the capital invested by this group. Using these historical records along with the data from the ledgers, it is possible to put together a fuller picture of not only individual wealth during wartime but also their historic sources of wealth and income. In Chapter 4, I will examine those investors whose occupation was described in the ledgers, exploring what their changing role tells us about wartime and post-war economic change.

To the extent that an investor in War Loan had capital, the assumption is that it was earned through practice of a service or a business or inherited from family. In this chapter, I will argue that the occupation of investors can be used broadly to explain the source of their capital. Overall, I demonstrate that in general terms, the size and patterns of investment followed the fortunes of various occupations both during the war and in the years after. In general, investors employed in occupations and businesses benefiting from surging wartime demand emerge as providers of a rising percentage of capital in the interwar period. The uneven, if widespread, extraction of profits from war-related businesses allowed some investors to make outsized profits that could later be invested in War Loan. Professions that experienced weak income growth relative to inflation generally show slowing investor participation. Rising inflation during wartime eroded the ability of earners to add to their pile of savings. While identifying the investors' occupation on its own is not enough to make firm conclusions about the source of wealth, it is a reasonable guide to its origins. This general conclusion needs a caveat; it is far from the case that all members of the same occupation made similar investments in War Loan, and some occupations had a handful of investors making very large, or very small, purchases. Another caveat is that analysis of the size and composition of estates passing at death suggest that War Loan, in the interwar years, was a relatively small percentage of total wealth. This is described in Chapter 6.

In this chapter, I look at the investor base for each of the three samples. The ledgers also record capital raised by what I have termed 'institutions' – mostly banks and insurance companies and stockbrokers engaged in borrowing and lending capital – as well as corporates engaged in business and some charities and trusts. Institutions, as a group, were a significant source of capital shown in Chapter 2.

The Distribution of Income and Wealth in Britain in 1914

War presented Britain with two significant challenges. The first of these is that the capital pool was deep, but narrow. Second, British investors had long established a taste for investment abroad where returns were higher than those available at home. Tapping that capital pool and bringing it back home would become two of the most critical efforts that Britain would undertake in wartime. This is detailed in Chapter 2. The reason to look closely at the occupation of investors is precisely because of the inequality of distribution of income and wealth at the outbreak of the First World War. Knowing the investor's occupation offers an insight into how wealth was accrued. That wealth came, in part, from earned income in excess of what he needed to maintain a given standard of living. Sums above that could be saved and invested. For the period preceding 1914, the lack of social mobility meant that an investor's occupation alone might be a signal that inherited wealth had been available. Income from inherited wealth would have added to other earned income. Over time, the need for government to command both capital and labour needed for war, as well as the production and pricing of goods and services produced for the purpose of waging war, would force some change in the distribution of both incomes and wealth. After the war ended, the need to service and repay outstanding debt – combined with the rising demands to reduce inequality – led to even further redistributions of income and wealth. In trying to understand the sources of capital invested in War Loan, looking at the occupations of investors, therefore, seems a good place to start. But inequality in wealth distribution in 1914 meant that at least initially, there were relatively few individuals or institutions from whom capital could be borrowed. With the benefit of hindsight as seen from the twenty-first century, on the eve of the First World War, 'the concentration of wealth was extraordinary,' in the words of

Edgerton. He cites one estimate of wealth during the Edwardian years that 1.0 per cent of the population owned 69 per cent of the national wealth while 10 per cent owned 92 per cent of all wealth, making Britain more unequal than most other European countries. He cites another estimate for 1914 pointing to a third of national wealth in the hands of 0.25 per cent in the hands of the working population.[151] Harry Campion calculated that in 1911–13, 2.9 to 3.3 per cent of the population aged over 25 had property valued at £1,000, and even then, it is unlikely that an investor would have put the entirety of their own wealth into a single tradeable security. During that period, those adults aged over age 25 with property valued at more than £5,000 were 0.8 to 0.9 per cent of the population.[152] At the outset of war, the potential pool of investors was a very small percentage of the UK total population. One measure of inequality perhaps can be seen by the number of taxpayers assessed for income tax. Of Britain's 36 million of population in 1911 including just over 10 million children under age 15, only 1.2 million people had incomes high enough to be assessed for tax in 1913.[153]

The following table was constructed by economist A.L. Bowley in 1920. Bowley calculated that those with incomes of £10,000 per year and over accounted for 0.0012 per cent of the total number of UK incomes in 1910 but just under 5.2 per cent of the total value of all incomes.[154]

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[151] Edgerton, *The Rise and Fall of the British Nation:* 119. Edgerton is citing J. Harris, *Private Lives, Public Spirit: A Social History of Britain 1870–1814*, Vol. *33* (Oxford, Oxford University Press, 1993), 397 and C.L. Mowat, *Britain between the wars 1918–1940*, (London: Taylor & Francis, 1963), 205.

[152] Henry Campion, *Public and Private Property in Great Britain*, (London, Oxford University Press, 1939), Table 13, 109.

[153] Daunton, *Just Taxes:* 65.

[154] Bernard Waites, *A Class Society at War: England 1914–18*, (Leamington Spa: Berg, 1987), 87.

Table 3.1: The Distribution of Personal Incomes in the UK, 1910*

Income Group	Size of Income £	Number of Incomes	Percentage of Incomes in Group of # of Incomes	Aggregate Value of Incomes (£ millions)	Percentages of Total Value of Incomes
A.	Under 160	18,850,000	94.52	1,055.00	56.357
B.	160-700	880,000	4.41	250	13.35
C.	700-5,000	200,000	1.0	415	22.167
D.	5,000-10,000	8,143	0.04	55.05	2.941
E.	10,000-20,000	2,903	0.0146	39.1	2.089
F.	20,000-45,000	1,026	0.005	29	1.549
G.	>45,000	327	0.0016	28.9	1.543

* Bernard Waites, *A Class Society at War: England 1914-19* (Leamington Spa, Berg, 1987):87.
Table Source: Arthur Lyon Bowley, *The Change in the Distribution of the National Income 1880-1913* (Oxford, Clarendon Press, 1920).

Table 3.2: The Distribution of Personal Incomes in the UK, 1919–20 Fiscal Year*

Income Group	Size of Income £	Number of Incomes	Percentage of Incomes in Group of # of Incomes	Aggregate Value of Incomes (£ millions)	Percentages of Total Value of Incomes
A.	Below £400	20,057,000	96.43	2,546,044	70.98
B.	£400-£1,750	642,270	3.08	479,279	13.00
C.	£1,750-£12,500	94,098	0.45	361,684	10.08
D.	£12,500-£25,000	4,247	0.02	74,749	2.08
E.	Above £25,000	2,385	0.01	125,423	3.50

* Waites, *Class Society at War*, 87.
Table Source: Board of Inland Revenue, 64th Annual Report

But war itself altered the distribution of both wealth and income. Waites uses data from the UK's Board of Inland Revenue for the 1919–20 fiscal year to illustrate some of the distributional effects of the war on incomes. While the distribution remained wildly unequal immediately after the First World War, it was less dramatically so than it had been in the years before. The combination of restrictions on capital and labour, on prices and production, on imports and consumption, made some people who previously were upper middle class into quite wealthy households. Some were able to earn small fortunes. The restrictions also lifted the wages of the working-classes as labour shortages forced government to intervene on their behalf in industries critical to war. The distribution of income and wealth was not static over the period of the war and the years which followed. William D. Rubinstein points out that war itself created opportunities for wealth.

In the years 1915 through 1919, the number of those with top fortunes – except at the millionaire level – rose by 17.3 per cent above the levels of the previous half decade. ‘It is true of course that prices rose at a rapid pace, but the feeling was then widespread, and as universal among Conservatives as among radicals, that the war had spawned a great crop of profiteers among munitions contractors, shipowners, merchants and even retail shopkeepers who grew wealthy not through any entrepreneurial effort, but merely by exploiting the government’s contracts and temporary dislocations in other spheres caused by the war,’ Rubinstein wrote.[155] Citing a calculation by Rubinstein, Waites notes that the number of those earning annual incomes between £5,000 and £10,000 had roughly doubled. ‘This can be taken as a measure of those who profited from the war,’ he writes.[156] Even so, Rubinstein notes that Probate records covering the years 1900 to 1938–9 – the dates of all three samples are sandwiched within this period – point to ‘glaring inequality’ at the top of the wealth spectrum although there is some evidence of rising wealth at the lowest end of the range. While two-thirds of Britain’s adult population still left nothing behind at death, a third did, and most of the gains occurred among those with the smallest pots of wealth. Even then, post-war, the distribution of higher incomes went to under 4.0 per cent of the population. It is unlikely that many of those with incomes below £400 per year were holders of War Loan. Historian Ross McKibbin points to tax increases imposed by Lloyd George’s post-war government as a factor reducing the inequality in income and wealth. In 1914, a wage-earner with £10,000 per year could keep 92 per cent of it; by 1920, that wage-earner could keep only 57 per cent. The purchasing power of post-tax income in 1914 of £10,000 would have required income of £18,000 in 1920 to be worth the same.[157] Thus, occupations of investors

[155] William D. Rubenstein, *Men of Property* (London: Croom, Helm, 1981), 41.

[156] Waites, *A Class Society at War*, 83–84, Citing Rubinstein, *Men of Property*, 47–48.

[157] Ross McKibbin, *Classes and Cultures*, (Oxford: Oxford University Press, Oxford, 2000) 38.

buying War Loan in the third sample 1919–32 are likely to differ from those in the first sample covering years 1914–18.

It wasn't just that inequality of income and wealth meant that capital had to be drawn from a relatively narrow pool of investors; inequality was also likely to have been a factor driving capital abroad. As discussed in Chapter 2, inducing investors to surrender their non-sterling denominated securities and accept War Loan in exchange was part of the second front in the 'battle for capital' to maintain the purchasing power of the pound abroad. In the late nineteenth and early twentieth centuries, British investment culture increasingly leaned towards overseas securities. Why British investors were so keen to invest their capital abroad in the late nineteenth and early twentieth centuries is still the subject of debate.[158] Economist Branko Milanovic's research shows that wealthy economies with the highest levels of inequality were likely to be the biggest exporters of capital, with Britain at the top of the list.[159] The reasons for this capital export may have echoed contemporary literature on what is known as 'secular stagnation'. That is, domestic demand was too weak to allow the wider economy – and the businesses operating within it – to grow. Because whole swathes of the population had too little disposable income with which to buy home-grown goods and services, businesses were unlikely to earn sufficiently high rates of return simply by catering to them. Rather than achieve low rates of return by investing in businesses at home, investors sent capital abroad.[160] The staggering wealth inequality, and its subsequent relative narrowing, must be central to our understanding of the sources of capital. Capital could only come from those who had it to spare regardless of patriotic sentiments. Understanding who had

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[158] B. Chabot and C. Kurz, 'That's where the money was: Foreign bias and English investment abroad 1866–1907,' *Center Discussion Paper No. 972*, (New Haven, Ct: Economic Growth Center (ECG) Yale University, 2009): 5.

[159] Branko Milanovic, 'Inequality, imperialism, and the outbreak of World War I' in *The Economics of the Great War: A Centennial Perspective,* eds. Stephen Broadberry and Mark Harrison, (Washington, D.C.: CEPR Press, 2018), 35–42. .

[160] Lawrence Summers, 'Demand Side Secular Stagnation,' *American Economic Review,101.5 (2015),*60–65.

wealth at the outbreak of war and how that changed over the sample period is central to answering the question about the sources of capital which would prove so crucial to the outcome of the First World War.

Investors with no stated occupation: Women

This section will look at the role women played as investors in War Loan and consider some of the factors that would have allowed this group to expand their participation as investors. Women are designated 'Married', 'Widow' or 'Spinster' in the Bank of England's ledgers. Women's participation as investors is hardly unexpected. Well before the outbreak of war, women constituted a small, but growing, pool of private investors. Moreover, the changing legal landscape was making it easier and safer for those with some wealth to participate directly in securities investment. Janette Rutterford and others note that the introduction of limited liability in 1856, extended in 1862, meant that shareholders were no longer at risk of losing their wealth to company creditors if they held stakes in a business which became insolvent. Another legal change enabled married women to participate on their own account as investors. The Married Women's Property Act of 1870, its amendment in 1874, and the second version passed in 1882 ensured that a wife's trading profits remained her own, as did assets she brought into a marriage. Rules that made personal investment cheaper and safer overall are likely to have contributed to the culture of investment that prevailed among Britain's upper-middle and wealthy classes in the late nineteenth and early twentieth centuries. Rutterford's research notes that women had long been investors in some widely held shares in the eighteenth century such as those of the South Sea Company and the East India Company. But the urban expansion of the early- and mid-nineteenth century offered the opportunity to invest in shares of railways, a form of investment considered relatively low risk. Women, as a percentage of all shareholders grew rapidly through the nineteenth century so that in the decade 1900–09, they accounted for roughly a third of all shareholders by number. However, studies show that as a group, they had less capital to invest in shares; in that period, they provided a much more modest 13.1 per cent of shareholdings measured by value.[161] Other literature confirms the idea that women became much more active investors towards the end of the nineteenth century. Acheson, Campbell and Turner, for example, looked at investors in 453 different companies between 1850 and 1900 and found that women – overwhelmingly those who apparently had no employment – accounted for 11.3 per cent of the capital committed and by number, were 21.5 per cent of all investors. Moreover, their numbers and capital contribution grew over the last half of the century; while these account for only 3.4 per cent of capital in the 1850s and 1860s, they were contributing 20.2 per cent of the capital by 1900.[162] They were, the study found, one of the fastest growing demographic among shareholder groups in the period 1850–1900, with numbers expanding by 7.0 per cent. In contrast, male *rentiers*, as a percentage of all shareholders within the sample, saw only a 2.2 per cent rise in participation, albeit from a higher base.[163] Indeed, so prevalent were women as investors that they were sought out as targets for the efforts of fraudsters, a practice about which women's magazines frequently warned readers.[164] Given that environment, it is small wonder that 'safe' government securities would have appealed to women investors in particular.

Moreover, there was a very strong incentive for women, particularly those without families, to be concerned with investment.[165] By the fourth quarter of the nineteenth century, women, and wealthier women particularly, had seen a surge in survival at older ages. The mortality review conducted by the Institute and Faculty of Actuaries covering

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[161] Janette Rutterford, David Green, Josephine Maltby, Alastair Owens, 'Who comprised the nation of shareholders? Gender and investment in Great Britain, c. 1870–1935' *The Economic History Review*, 64.1 (2011), 157–87.

[162] Graeme Acheson, Gareth Campbell and John Turner, 'Who financed the expansion of the equity market? Shareholder clienteles in Victorian Britain' *Business History* 50.4(2017), Table 5, 30.

[163] Acheson et al. 'Who finbabced?' Table 6, 32.

[164] George Robb, 'Women and White Collar Crime: Debates on Gender, Fraud and the Corporate Economy in England and America, 1850–1930' *The British Journal of Criminology*, 46.6 (2006), 1058-72.

[165] Janette Rutterford and Josephine Maltby, 'The nesting instinct: women and investing in a historical contex', *Accounting History*, 12 (2007), 305–27.

the years 1863–92 found that among insured female lives, mortality among women aged 60 had fallen by 53 per cent since the previous mortality review was conducted in 1862, and among those aged 65, by 27 per cent. The survey only included women wealthy enough to be covered by insurance, but it is logical that increasingly, this group would be concerned about making provision for old age.[166] Investment in War Loan by women was not uniform and, in the sampling exercise, it changed over time. In the next section, I will look at the categories of women by marital status to make some judgements about each group's source of capital. In each of the three samples, spinsters form the single largest group of women, but it is widows who have the largest median holdings. In looking at these contrasts, it is helpful to step back and look at the big picture presented by Inland Revenue data on wealth at death. The Commissioners of Inland Revenue conducted several reviews of estates passing at death that allow us to take a broad view of how women's wealth was allocated . asset class. The data are useful because they allow the comparison of women's holdings of War Loan at death in Britain to be compared with holdings of War Loan among women in the samples.[167] One question is whether the women who turn up in the ledgers of War Loan investors are representative of the wider pool of relatively wealthy women living in Britain at the time. When we compare the relative value of War Loan holdings in the sample with that of War Loan holdings passing at death, we can see that widows in the Inland Revenue data have contributed a far larger percentage of capital to all War Loan holdings held by women dying in those two years. In 1926–27 and in 1929–30, widowed women own just over half the War Loan assets passing at death. However, that may simply reflect the fact that the widows in the Inland Revenue data are likely to be older than those in the sample and have had more time to accumulate wealth. In each of the three ledger samples, spinsters are the group of women making the single largest contribution to War Loan holdings.[168]

[166] *Report to the Joint Committee of the Institute of Actuaries and Faculty of Actuaries Upon Mortality Experience*, 9 August 1897, 77.

[167] The analysis by gender are not common to every annual report from HMRC for the period. They can only be found in certain annual reports.

[168] *Seventieth Report of the Commissioners of His Majesty's Inland Revenue for the Year ended March 1927*, (London, HMSO, 1928), 22–25. *Seventy-Second Report of His Majesty's Inland Revenue for the*

Table 3.3: Value of War Loan Passing at Death, Fiscal Years 1926–27 and 1929–30* **

	Year	Total Estate Passing at Death (£s)	Value of Post 1914 War Loan at Death (£s)	Percentage of Estate in Post-1914 War Loan	Percentage of Total Estate by Gender	Percentage of Post 1914 War Loan by Marital Status
	1926-27	380,822,704	72,421,400	19.0%		
All Men						
Total Estate		251,688,252	45,325,326		66.1%	
Married		147,940,355	27,134,105	18.3%		59.9%
Widowed		63,429,015	10,413,526	16.4%		23.0%
Spinster		40,318,882	7,777,095	19.3%		17.2%
All Women						
Total Estate		129,134,452	27,096,074		33.9%	
Married		21,447,820	4,667,352	21.8%		17.2%
Widowed		68,731,079	14,206,208	20.7%		52.4%
Spinster		38,955,553	8,222,514	21.1%		30.3%
	1929-30	449,366,055	78,960,086	17.6%		
All Men				67.0%		
Total Estate		299,737,628	48,509,499		66.7%	
Married		178,818,389	26,020,618	14.6%		53.6%
Widowed		69,009,570	13,546,436	19.6%		27.9%
Spinster		51,909,669	8,942,445	17.2%		18.4%
All Women		149,628,427	30450587	20.4%	33.3%	
Total Estate			30,450,587			
Married		26,136,016	5,403,171	20.7%		17.7%
Widowed		78,146,902	15,768,332	20.2%		51.8%
Spinster		45,345,509	9,279,084	20.5%		30.5%

* Seventieth Report of the HMRC for Fiscal Year 1926-27 (London, HMSO, 1928): 21–25.

** Seventy Second Report of the HMRC for the Fiscal Year 1929-30 (London, HMSO, 1930): 20–23.

For both years, Inland Revenue data show that men's total wealth at death was roughly twice that of women who died in the comparable year, a pattern of capital distribution that is replicated in the samples as well as in some other studies of female investors in the

Year ended March 1930, (London, HMSO, 1931) 20–23. Analysis by gender and by marital status are contained only in these two reports during the interwar decade.

early twentieth century. Another significant pattern was that of widowed men and women; female widows with estates valued at more than £100 were significantly wealthier and more heavily invested in War Loan than other women. In 1926–27, widows had 49.4 per cent of all the wealth held by women dying in the previous year.[169] That percentage grew to over half by 1929–30. Those in the Inland Revenue data are those who have just died and are likely to be older than those in the sample. But a few numbers stand out; the Inland Revenue data show that for men, the highest percentage holdings in War Loan are among married men who have recently died. That goes some way towards explaining why, in the War Loan sample, widows appear to have such high concentrations of capital. These widows are likely to have inherited their husbands' holdings on passing. Also, widows as a group, were likely to be older on average than women generally; it is presumed that they were of similar ages to their deceased husbands. Given evidence that risk aversion rises with age, it is not surprising to find in the sample that widows were relatively heavy investors in War Loan.[170] This becomes particularly relevant later in this chapter when inherited wealth and assortative marriage emerge as significant sources of capital invested by women.[171]

When the sample results are examined, the general patterns seen in the Inland Revenue data are broadly similar, barring the caveats about the sample containing women of younger ages. Overall, the three samples cover 2,643 women investors over the 1914–32 period. When the sample is stripped of institutional investors, the role of women in War Loan becomes particularly apparent. By the time of the third sample, they account for just over half of all retail investors by number. However, as in the Inland Revenue data, the capital contributed by women to War Loan is roughly half that of men. This echoes the

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[169] HoC Parliamentary Papers Online, *Seventieth Report of the Commissioners of His Majesty's Inland Revenue for the Year Ended 31st March 1929*, (London, HMSO, 1930): 22–25.

[170] Thomas Dohmen Armin Falk, Bart HH Goldsteyn, David Huffman, Uwe Sunde, 'Risk Attitudes Across The Life Course', *The Economic Journal*, 127.605, (2017), f95–f106.

[171] *Seventieth Report of the Commissioners of His Majesty's Inland Revenue for the Year ended March* 1927, (London, HMSO, 1928), 22–25. *Seventy-Second Report of His Majesty's Inland Revenue for the Year ended March 1930,* (London, HMSO, 1931) 20–23.

earlier studies which found that although the absolute number of women investors was rising rapidly in the pre-war years, the capital available for investment remained significantly below that of men. This is consistent with research by Rutterford et al. and by Acheson, Campbell and Turner on women's investment patterns.[172] Table 3.4 (below) illustrates the relative contribution that women made to War Loan investment; while numbering just over 40 per cent of all retail investors in the first sample, they provided a much smaller 23.1 per cent of retail capital. By the time of the third sample they were just over half of all retail investors by number. Their participation as capital providers, at roughly a third of the total, was much higher than it had been in earlier years but still did not reflect the numbers of women participating. Nevertheless, demand for War Loan from women investors would have underpinned prices of securities over the entire 1914–1932 period.

Table 3.4 Gender of Retail Investors in War Loan, All Three Samples*

	3½% 1925-28		5% 1925-47		Converted to 3½%	
	% Retail investors	% Retail Holdings	% Retail Investors	% Retail Holdings	% Retail Investors	% Retail Holdings
Males	58.8%	77.3%	58.6%	75.9%	48.9%	68.2%
Females	41.1%	23.1%	41.4%	24.1%	51.1%	32.4%

* Sums may not equal due to rounding.

Nevertheless, the rates of participation and the contributions of capital to War Loan vary considerably. As in the pre-war period, women's participation in War Loan investment was not static; it expanded. Aside from increased financial independence, the influences in this expansion were probably demographic. The 1921 Census for England and Wales is a good starting point for understanding that change. That Census found that the preponderance of women generally over men had grown to 1,720,801, or 1,095 females to every 1,000 males, higher than the ratio standing in 1911 at the previous Census and the highest since records began in 1801.[173] But there was another factor at work; Britain,

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[172] Janette Rutterford et al, 'Who comprised the nation of shareholders? *The Economic History Review*, 64, no.1, (2011): 157–87. Acheson, Campbell and Turner, 'Who financed?' Table 6, 32.

[173] Census of England & Wales 1921, *Preliminary Report*, (London: HMSO, 1921), 11.

along with many other countries, had begun a fertility decline in the years 1880–1910. Roughly 15 to 20 per cent of women born around the end of the nineteenth century had not married by end of their fertile period and well over half of that entire cohort had either no children or only one.[174] Moreover, the national decline in fertility beginning in the late nineteenth century was not evenly spread; the upper and middle classes began to have fewer births per woman earlier than women among the working class. The rate of fertility decline receded as mothers fell down the rankings of income.[175] That meant that to the extent that women were able to inherit the wealth of their parents, there were fewer siblings to divide it among, leaving each with a larger estate than might have been received by an earlier generation. The fact that the most pronounced declines in fertility occurred among the upper and middle classes suggests that the households with the largest estates would divide these among progressively fewer heirs. Thus, over time, women would have had larger pools of capital available for investment simply because there were fewer siblings with whom to compete for an inheritance.

But there was a further – and very painful – demographic factor in the form of war casualties. Victory in the First World War was achieved at the price of an appalling loss of life among British and allied combatants. During and after the war the idea of a 'Lost Generation' took shape with loss of life particularly acute among the privileged. In a 1977 paper, Jay Winter sought to unpick the theory and concluded that there was some evidence that in the early years of war, those higher up the social scale certainly had high rates of enlistment. Winter concluded 'The most severely depleted social groups were the most privileged,' suggesting that there may have been knock-on effects of marriage prospects for women of similar ages and social status.[176] The grieving beneficiaries of those deaths would have been female siblings inheriting a larger proportion of their

[174] Michael Murphy, 'Long-Term Effects of the Demographic Transition on Family and Kinship Networks in Britain', *Population and Development Review*, 37 (2011): 55–80.

[175] Simon Szreter, *Fertility, Class and Gender*: *1860–1940* Vol. 27, (Cambridge: Cambridge University Press, 2002), 12.

[176] Jay M. Winter, 'Britain's 'Lost Generation' of the First World War', *Population Studies*, 31,3, (1977), 449–66.

parents’ estate than they might have otherwise, and indeed, the median size of women’s’ investment holdings rose by 69% between 1914–32, from £200 to £338.

The sampling exercise, like the review conducted by Inland Revenue, found significant differences among women depending on marital status.

Table 3.5 Women Investors in War Loan by Marital Status: Percentage of Investor and Percentage of Capital*

	3½% 1925–28			5% 1929–47			Converted to 3½%		
	% total female investors	% total female holdings	Median holding £	% total female investors	% total female holdings	Median holding £	% total female investors	% total female holdings	Median holding £
Spinsters	45.9	38.2	100	44.8	43.8	200	40.7	40.2	300
Widows	17.4	25.9	300	19.3	25.7	350	26.2	34.4	500
Married	37.0	36.0	200	35.1	30.7	200	33.1	25.3	300

* Sums may not equal due to rounding

In each of the three samples, spinsters were the single largest group of women investors and had median average investments below those for women generally. Some of this may reflect the fact that the spinster group had large numbers of relatively young women who had not had an opportunity to accumulate much wealth. However, over the 1914–32 period, their median investment trebled to £300 while that for married women and widows rose more slowly. This suggests that wealth available to spinsters rose more quickly than that for other similar groups of women. For all but a handful of exceptions, particularly the sample of women investors in the years 1919–32, the ledgers offer no evidence of the source of women’s’ invested capital. It is only by matching women with the 1911 Census that some picture of the source of female wealth emerges, and that picture is overwhelmingly one of inherited wealth.

Unmarried Women (Spinsters) as Investors

Of sixteen women within the first sample who can be matched with the 1911 Census, twelve were spinsters. Of these, five told the Census recorders that they were living on ‘own means’ or ‘private means’, a reference to inherited capital that is generating interest or dividend income. Some of that interest income was no doubt used to expand investment portfolios. A further four are living in households where it is evident that a parent's wealth is substantial and likely to be inherited. This becomes spectacularly apparent in the case of the sample's single, largest female investor, a £20,000 'buy' by Emily Charlotte Talbot, designated as a 'Spinster' in the ledger, who made a single purchase in December 1914. Miss Talbot was the daughter and became the heiress of industrialist and landowner Christopher Rice Mansel Talbot after the death of her brother in a hunting accident.[177] She made land available for further dock extensions at Port Talbot where her father had already developed a steelworks and oversaw the conversion of family-owned Penrice Castle into an officers' hospital during the war. She died in September 1918 before the allied victory.[178] Talbot was not alone among women who inherited great wealth and bought War Loan. Mary Gwendoline Sawbridge, a Spinster who invested £1,000 in War Loan in February 1915 is found in the 1911 Census at the address recorded in the ledger in Hungerford, Berkshire. She was aged 29, and lived with her sister and father, a 71-year old retired army captain and seven live-in servants.[179] When her father died in 1923, probate records show he left assets valued at £32,912.[180]

The sample, however, also includes at least one spinster earning what would have been viewed as a 'man's salary'; Julia Caroline Mary Mocatta invested £300 in December 1914, converting it to 4½% War Loan in October 1915. Miss Mocatta was a pioneering nurse, according to King's College London where she did her training. In the years 1895–1900 she earned £100 per year, well above the national median wage. But even then, it is not clear that her invested funds were entirely from employment; her father had been Vicar of Bispham, Blackpool and later of St Thomas's Church, St. Helen's, Lancashire

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[177] Louise Maskell, 'Talbot, Emily Charlotte' in *Oxford Dictionary of National Biography (*Oxford: Oxford University Press, 2016).

[178] Grace's Guide to British Industrial History, https://www.gracesguide.co.uk/Emily_Charlotte_Talbot (accessed 16 September 2019)

[179] 1911 Census, England & Wales, Berkshire, Kintbury and Avington, 03, 426.

[180] England & Wales, Probate Calendar, 1923, Quadri-Szczepanski, 174.

and she may also have had inherited wealth.[181] Probate records show that Reverend William Abraham Mocatta died December 1876, leaving an estate of under £4,000.[182]

Equally ambiguous is Emma Bourrie Hamilton, identified in the ledger as a spinster living in Bexhill, East Sussex, who invested £500 in War Loan in December 1914. In the 1911 Census, she is aged 32 and identified as 'Principal, private Girls' School.' But living with her – aside from three teachers and five live-in servants – is Amelia Meena Florence Hamilton, a widow whose occupation is 'Former Principal', a hint that Emma inherited the school.[183] It also suggests that her mother had run a school and could have been a business woman in her own right. In the 1901 Census, Emma was aged 22 and a student at St Hilda's College, Oxford. The house where she was living is headed by two widowed sisters, one of whom is a shopkeeper and the other 'Living on own means'.[184] At her death in October 1952, she remained a spinster, but left effects of £56,686.[185] Despite the benefits of her Oxford University education and a career as principal of a private girls' school, it is difficult to imagine that she could have amassed a fortune of that scale without inheriting some of it. Indeed, even having been propelled into one of the few women's colleges available at the time is a feat likely to have required significant parental resources. Of the remainder who could be identified in the Census, two were head teachers and one was listed as a 'Farmer (Employer)'.

By the time of the second sample covering years 1915–24, signs that spinsters' wealth may have had roots in employment begin to emerge, albeit in very small numbers. Of 357 spinsters, it was possible to match thirty-four with the Census. Of these, thirteen described themselves as living on 'own' or 'private' means. A further eighteen spinsters were living with a parent whose own occupation was likely to have enabled a child to

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[181] King's College London website, 'Pioneering Nurses', P M-O:http://www.kingscollections.org/nurses/m-o/mocatta-julia-caroline-mary-mocatta (accessed 16 September 2019).

[182] England & Wales, National Probate Calendar, 1877, Mabb-Nye, 266.

[183] 1911 England Census, Sussex, Bexhill, 08, 408.

[184] 1901 England Census, Sussex, Preston, District 40, 24.

[185] England & Wales National Probate Calendar, 1953, Haag-Jetsum, 38.

inherit wealth. One example is Adelaide Matilda Hunt of Enfield, Middlesex, aged 54, who purchased or converted a total of £13,500 into both the 4½% and 5% War Loans between October 1915 and March 1918. In the 1911 Census, she was living with her parents including her 87year-old father, an iron merchant.[186] When her father, John Alfred Hunt, died in 1913, he left an estate valued at £67,564. In a similar vein, there was a £3,928 investment by Maria Bazett, a Spinster from Crowthorne, Berkshire who initially purchased £1,000 of 4½% War Loan from a broker in September 1915 topping up her purchases with additional buys in 1915 and 1916. Ms Bazett, in the 1911 Census was aged 51, living in a household with her mother who was also living on 'Private Means'.[187] In the 1881 Census, Ms Bazett's father, then aged 68, was a retired Indian civil servant, suggesting that his own family had enough wealth to see him through the kind of schooling that would have enabled him to reach a position of that sort. The family home included eight children and four live-in servants.[188] Probate records show that at Maria Bazett's death in December 1931, she left an estate valued at £4,633.[189]

The sample also includes, however, a further four unmarried women who may have earned their capital through employment, although in each, the possibility of inherited wealth is also evident. For example, Jeannie Doggert, of Newtownards, County Down, and an investor in £50 of War Loan in March 1917 is, unusually, listed in the ledger as a Machinist, although she could not be matched in the Census. Alice Selina Taylor of London, a spinster who invested £754 in War Loan, made her first buy of 4½% War Loan 1925–45 in September 1915, converting to the 5% War Loan in July 1917 and making additional purchases, until finally amalgamating her holdings in February 1920. Ms Taylor had a co-investor, a John Taylor. In the 1911 Census, she was aged 26, living at the Red Lion in Bermondsey with Charles Hewitt Simpson, a licensed victualler, and

[186] 1911 England Census, Middlesex, Enfield, 35, 648.

[187] 1911 England Census, Berkshire, Reading, St Mary, 09, 22.

[188] 1881 England Census, Berkshire, St Mary, District 4, 15.

[189] England & Wales, National Probate Calendar, 1931, Aaron-Cyzer, 224.

his wife, Alice. Her occupation was recorded as that of 'bar maid'.[190] Her co-investor, John Crosland Taylor, appeared in the 1911 Census and was possibly a male relative. In the 1911 Census, he was listed as a 44 year-old married man who was the secretary to public companies in the railway and building sectors.[191] The ledgers point to other signs that women were beginning to seek not just employment but independent living. Rosalind Rance, investor in £300 in 5% War Loan, is recorded as living at The Enterprise Club, a residence for professional women at 1 Bury Street, London.[192] In the 1911 Census, Miss Rance was aged 47, single and living with her 43 year-old sister in Finsbury Park. Both were employed as 'secretary and stenographer'.[193] That fact that new venues were emerging that catered to employed women's desire to live independently is some mark of growing demand.

By the time of the third sample covering years 1919–32, more unmarried women investors were beginning to emerge as likely providers of their own wealth. Of 402 unmarried women among the sample of 986 women, 29 were matched with the Census. Some of these were the largest retail investors in the third sample. The single largest investment by a spinster was that of Frederica Mary Cory of Kensington, London, who purchased a total of £31,800 using £9,994 of existing War Loan to build a bigger stake beginning in September 1927 and adding to it in 1928 and 1930 as Britain slid into Depression. She assented to a cut in the coupon to 3½% in July 1932. Records show that probate on her estate was granted in Llandaff, Wales, and that she left effects of £149,272.[194] This suggests that despite the large size of the stake relative to that held by women generally, it was only a small part of her overall wealth. She was the daughter of Richard Cory, a Wales-based owner of coal and shipping interests and if those businesses

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[190] 1911 England Census, London, London, Bermondsey, Rotherhithe, 20, 48.

[191] 1911 England Census, London, Kensington, Kensington South, 08, 618.

[192] Elizabeth Crawford, *The Women's Suffrage Movement: A Reference Guide 1866–1928* (London: Routledge, 2003) 120. The Club was founded in 1899 at 57 and 58 Leadenhall St, EC, to provide a convenient place for rest and recreation for women clerks over 18 years of age.

[193] 1911 Census, Middlesex, Hornsey, 13, 922.

[194] England and Wales National Probate Calendar, 1949, Cabanne-Dzvonsky, 207.

remained within her control, she is likely to have been a beneficiary of wartime demand.[195] The record shows her father died in 1910, well before the outbreak of war.

The importance of inherited wealth to women's ability to invest in War Loan is underscored by an investment of £8,078 by a spinster, Christine Pilkington, daughter of glass manufacturer William Windle Pilkington. In the 1911 Census, she was unmarried, aged 31, living with her parents, brother and sister-in-law and eight live-in servants.[196] The ledgers show the stake was transferred in from another ledger in December 1920 but sold off in its entirety by January 1921 as Britain slid into a deep recession. Of the other unwed women in the third sample, four are described were living on 'own' or 'private means'. A further fifteen were living with a parent or sibling who appears to be the financial supporter of the household. However, 10 appear to have been employed in sectors that could allow them to earn the necessary capital for an investment in War Loan. These include three female teachers and one 'inspectoress of schools'.

When employed, women were conspicuously less well paid than men and teachers were no exception. In 1924, a qualified female teacher would earn an average salary of £272 per year compared with £353 per year for a man. By 1936, that had risen to £265 per year for women versus £348 for men.[197] Octavia Margaret Sophia Lewin, living in London's Wimpole Street, invested £750 of apparently inherited funds in 1925 with a co-investor described in the ledger as a solicitor. In the 1911 Census, she was aged 30, living with a sister and is described as refusing to give information about herself to the Census taker, and quite probably was a suffragist. The Census taker describes her as an Assistant Physician at the 'London Hemative Hospital'.[198] Two others are respectively a dressmaker and a business assistant. Another investor, holder of £857 in War Loan at the

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[195] 1911 England and Wales Census, Glamorgan, Cardiff, East Cardiff, 11, 933.

[196] 1911 England Census, Lancashire, Huyton with Roby, 18, 346.

[197] Guy Routh, *Occupation and Pay in Great Britain: 1906–60*, (Cambridge: Cambridge University Press, 1960) Table 33, 69.

[198] 1911 England Census, London, St Marylebone, All Souls, 11, 47.

time the coupon was cut, Annie Nicol Leishman, was recorded in the ledger as the manageress of a hotel in Greenock, Renfrewshire. Her death certificate in 1943 confirms that she held that employment.[199] More intriguing is Christine Mary Ramsay, a London-based investor purchasing £1,270 in War Loan in 1924. In the 1911 Census, she was aged 24 and, with her twin sister, a Magic Lantern Show Artist. Her father and brother are described as musicians.[200] Magic Lantern shows were a form of popular entertainment using a technique for transferring images from photography on to glass slides and hand-colouring them.[201]

It is easy to presume that spinsters, as an investor group, would be the most likely to be employed outside the home. Without a husband to support them, women might have taken advantage of rising employment opportunities. Unconsumed savings from salaries could be recycled into War Loan. But the sample does not point to rising levels of investment from employed spinsters over the 1914–32 period. While the employment of women jumped sharply during wartime, it is not clear that the new opportunities to work expanded their income enough to allow for large-scale saving. In the Clyde Valley, for example, the number of women employed to work in munitions factories alone jumped to 31,512 by October 1918 from 20,546 in October 1916, a time when recruitment of women was already underway.[202] But in Scotland overall, women exceeded the number of men as investors only for the second sample covering the years 1915–1924, and only then in the combined counties of East Lothian, West Lothian and Midlothian. In Lanarkshire, home to the Clyde Valley and its war-intensive machinery, shipbuilding and munitions factories which stepped up female employment sharply during wartime, women never exceeded 38 per cent of all investors. The number of investors living in Lanarkshire more than doubled between the first sample and that of the post-war period,

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[199] Deaths in the District of Cathcart in the Burgh of Glasgow, (Statutory Deaths 664/19 06651), 222.

[200] 1911 England Census, London, St Pancras, South St Pancras, 440.

[201] Magic Lantern Society: http://www.magiclanternsociety.org/about-magic-lanterns/lantern-slides/ (accessed 16 September 2019).

[202] W.R. Scott and J. Cunnison, *The Industries of the Clyde Valley During the War*, Volume 13 (London: The Clarendon Press for the Carnegie Endowment for International Peace, 1924), 98.

from 47 to 116, and Lanarkshire consistently accounted for roughly half of all the capital raised in Scotland. Yet that jump in population does not appear to have led to a rise in numbers of women investors. At the other end of the country, women never accounted for even half of each of three London samples.[203]

To summarise, spinsters and the expanded work opportunities available to them do not appear to have necessarily translated into greater investment by them in War Loan. Employments that particularly attracted women were those of elementary school teacher, clerk, typist and telephonist. By 1911, women were 6.0 per cent of those employed in jobs classified as 'higher professional.[204] However, they also formed just over 10 per cent of the total of employers and proprietors in the farming sector in 1911[205] The conclusion to be drawn from the relative participation of women as investors in parts of Britain most prone to increased employment is that the capital used was not that derived from employment. More likely, it was inherited wealth.

Married Women as Investors

Legislation in the nineteenth century had long made it possible for married women to hold property in their own name without the risk that it could be seized by a husband, a factor which had encouraged female investment (see above). The role of inherited wealth in providing the capital for investment in War Loan by women appears particularly acute in the case of married women. These are the smallest group of

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[203] Geographic breakdown of the three-sample series suggests that areas of the country likely to experience increased demand for labour during wartime had among the lowest surpluses of women to men of any part of the country. For example, Northumberland, home to the shipbuilding and mining industries , had rates of female War Loan investment well below national averages. That suggests that it was not income from employment that was increasing the ranks of women investors. Even in counties where women had been most of the adult population before 1914, the number of women investors did not overtake the number of male investors until after the war. This confirms the impression that it is the loss of male lives that increased the numbers of female War Loan Investors.

[204] Routh, *Occupation and Pay inGreat Britain*, 16.

[205] Routh, *Occupation and Pay in Great Britain*, 22.

women in each of the three samples and the percentage of capital contributed to each sample of War Loan is under-representative of their numbers as a percentage of investors. Moreover, across the entire period 1914–32, the median investment for married women grew more slowly than that for spinsters or widows, rising 50 per cent from £200 to £300. As with the group of spinsters, Census data offer reliable clues to the sources of married women investor's capital. These, too, reinforce the role of inheritance as the provider for War Loan investment capital. Indeed, the ledgers and Census point to a pattern of what economist Gary Becker describes as 'assortative marriage', which applies an economic framework to the decision-making that leads men and women to marry each other. A key assumption of assortative marriage is that there is a *market* for suitable marriageable partners and that the earnings power of each partner is a factor in the choice. However, at a time when middle- and upper-class women in Britain did not work for wages, it is more likely that wealth, rather than income, was the significant factor in determining who marries whom.[206] Indeed, F.G. D'Aeth, in his 1910 study of social class in England, pointed to the role of marriage as a means of cementing class structures. Using data from two unnamed churches which he described as 'popular for marriage purposes', D'Aeth found that in 13 cases, the occupations of the husband, his father and the wife's father were identical while in a further 13 cases, the husband was employed in the same occupation as the wife's father. In only 24 out of 131 cases were the man and his father-in-law employed in work of different social classes.[207] When married women investors can be matched in the Census, assortative marriage appears to play a role in making capital available. Augusta Sophia Barclay, a married woman who invested a total of £3,000 in War Loan in January and February 1915, appeared in the 1911 Census as living at the address shown in the ledger with her husband, son, daughter, mother and three live-in servants. The occupations of both her husband and her own mother are recorded as 'Independent Means'.[208] In the 1881 Census, she

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[206] Gary Becker, 'A Theory of Marriage: Part I', *Journal of Political Economy*, 81.4 (1973) 813–846.

[207] F.G.D'Aeth, 'Present Tendencies of Class Differentiation', *Sociological Review*, 3.4 (1910), 275–6.

[208] 1911 England Census, Kent, Margate St John the Baptist, 16, 416.

was Augusta Sophia Oriel, aged 19, living in Hammersmith, London with her already-widowed mother and four live-in servants. No occupation is recorded for the mother.[209] But the implication is clear; a woman raised on the proceeds of investment income has married a man who, in turn, lives on investment income. Married women of more modest means also appear to have had 'assortative' marriages. In the second sample, Lucy Mary Martin of Carlesworth Park, Horley, Sussex, is recorded as having purchased a total of £350 in War Loan, beginning with a £200 purchase of 4½% War Loan 1925–28 in November 1915. That loan was trading at 97 ½% of its 100d launch price, giving her the handsome yield to redemption of 4.83%.[210] In the 1911 Census, she was married to a farmer and the mother of six children. Unlike the homes of many investors in War Loan that can be matched with the 1911 Census, there are no live-in servants.[211] Some of her capital may have come from her premarital days; in the 1881 Census, she was aged 21, living in Grove House, Marylebone, London, where she was occupied as a kitchen maid.[212] Her husband, Owen Martin, also appears to be from a lower middle-class background; in the 1871 Census, he was aged 15, living with his parents, brother and sister. His father was employed as a butcher and general labourer.[213] Indeed, this may well be an example of a household enjoying a bit of economic mobility thanks to the fantastic increase in commodities prices in wartime.

Contrast Mrs Martin's fortunes with those of Lady Florence Lushington, who was living in The Hermitage, Melton, Suffolk and was an investor of £150 in 5% War Loan in March 1917. In the 1911 Census, Lady Florence was aged 44, living with her daughter – no husband was present on the night of the Census – and five live-in servants.[214] But 20 years earlier, she was aged 25, had no title and was simply Florence Burness, living with

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[209] 1881 England Census, London, Hammersmith, St Paul Hammersmith, District 7, 2.

[210] Martin Ellison and Andrew Scott, 'Managing the UK National Debt 1694–2018', *American Economics Journal:* Macroeconomics (forthcoming).

[211] 1911 England Census, Surrey, Charlwood, 03, 246.

[212] 1881 England Census, London, Marylebone, Christchurch, District 17, 6.

[213] 1871 England Census, Buckinghamshire, Iver, District 6, 8.

[214] 1911 England Census, Suffolk, Melton, 07, 268.

her parents, three brothers, two sisters and nine live-in servants in Greenwich. Her father's occupation was recorded as 'East India Merchant'.[215] Her title appears to have been acquired via marriage to Sir Arthur Patrick Douglas Lushington.[216] He, in turn, was a Major, Regiment 3 DG and apparently stationed in India during the war.[217]

However, it is possible to be reasonably certain about some married women investors in the third sample covering the years 1919–1932, and inherited money remains significant. One, Lady Annie Christine Sutherland, living at Birthwaite Hall, Barnsley, invested £5,000 in War Loan in December 1923, amalgamating it shortly after with other investments she already held in government securities. In the 1891 Census, she was aged 17 and the daughter of Joseph Fountain, a colliery owner and farmer, living at Birthwaite Hall.[218] In 1921, she married William Sullivan, but it is her own business acumen that appears to drive the fortune. By 1923, she was – unusually for the time – listed as a director of several collieries associated with her family. These include Fountain & Son Ltd and Wharncliffe, Woodmoore Colliery, both of which list Birthwaite Hall as their corporate address.[219]

Married women may not have been inheriting sums substantial enough for them to be very active participants in War Loan investment. Using the 1921 Census as a guide – it is close to the mid-point of our sample period – married women are under-represented as investors by the time of the third sample of War Loan. According to that Census, there were 19.8 million women in England and Wales at the time. Of these, single women were 36.2 per cent of the Census but 40.7 per cent of the sample, while married women are 52.5 per cent of the female population but only roughly one-third of the sample.

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[215] 1891 England Census, London, Greenwich, Greenwich East, District 11, 49.

[216] England & Wales National Probate Calendar, 1026, Labbett-Pyzer, 150.

[217] UK, British Army Lists 1881–1962.

[218] 1891 England Census, Yorkshire, Kexborough, District 3, P 20

[219] Durham Mining Museum, electronic records: http://www.dmm.org.uk/whoswho/s041.htm(Accessed 15 September 2019)

Widowed women as Investors

Widows, meanwhile, are over-represented in the sample relative to their presence in the female population as a whole; for England and Wales, these constituted 11.3 per cent of the nation's women but were 26.2 per cent of the sample.[220] The reason may well be that as a group, widows with capital to invest are wealthier than any other group of women. Not only were they likely to hold inherited assets from their own families but they have also inherited the assets of their deceased spouse. Indeed, median investments by widows are far larger through all three samples than those held by either spinsters or married women. The size of the investments confirms the trend of assortative marriages which emerged among married women generally.

However, there is some evidence within the ledgers that widows, too, pursued business opportunities when they had the chance. In the second sample, for example, Hannah Maria Stevenson, a widow from Spalding, Lincolnshire, was described in the 1911 Census as already widowed and working as a 'Grocer & General Dealer'. She was aged 48 with a 21-year-old son and two teenage daughters.[221] In 1919, she invested £1,100 in 5% War Loan 1929–47 and held it after her records were transferred to a new ledger in 1924. She is likely to have inherited the business after the death of her husband, John, who appeared in the 1881 Census as aged 34 and a licensed victualler.[222] In the first sample, 21 of 150 widows – 14 per cent of the total – have investments of £1,000 or more compared with just 14 spinsters of 394 Spinsters and 24 of 319 married women. The respective weightings of very large holdings for spinsters and married women are 3.6 and 7.5 per cent. Nevertheless, women investors played a role in supplying capital for War Loan, using, for the most part, inheritances from first parents, and later from their spouse. Additional capital may have been generated by investment activity itself. In the third sample of War Loan, 38 women investors have been matched in the 1911 Census whose

[220] *Report of the 1921 Census for England and Wales,* Marital Conditions: Proportions by Sexes in Age Groups, Table 36, 144.

[221] 1911 England Census, Lincolnshire, Whaplode, Holbach, 19, 114.

[222] 1881 England Census, Lincolnshire, Holbeach, Holbeach, District 8, 2

aggregate capital, at £105,444 represents just under 14 per cent of all investment by women. As with the male sample, the average 'buy' size is increasing and the number listing an occupation of their own has risen to 10 from five in the second sample.

Overall, the pattern of female investment that emerges from the ledgers is consistent with the wider literature on the investment culture among women from around the mid-nineteenth century. The picture which emerges from the sampling exercise is consistent with that of a gradually expanding female middle class of investor, increasingly wealthy and increasingly independent. The sample is consistent with the literature showing that while women were progressively likely to be retail investors in the decades before and during wartime, the capital available for investment was less than that available to men. This began well before 1914, a time when suffrage was denied to women completely and most middle- and upper-class women were not employed in remunerative work. Indeed, data from the 1921 Census show that among the 3.7 million women over the age of 12, three-quarters of these are simply not working. The remainder are either retired from full-time employment or in full-time schooling.[223] Even if the numbers of working women were growing during the 1914–32 period, they did so from a relatively low base. The sample also points to gradually increasing female workforce participation, as well as a growing desire to live independently of family. But the big picture is still one where inherited capital plays the most significant role. Those who inherited little to nothing had little to nothing to invest in War Loan, regardless of how patriotic they were. The prevalence of inherited wealth among women investors in War Loan sold via the Bank of England also underscores the role that rising death duties after the First World War are likely to have played in reducing inequality; these restricted the ability of the wealthiest families to pass on fortunes intact, to male or female heirs. An examination of women

[223] A.M. Carr-Saunders and D. Caradog Jones, *A Survey of the Social Structure of England & Wales as illustrated by statistics*, (London, Humphrey Milford, 1927), 59. Carr-Saunders and Caradog Jones take their data from the 1921 Census. In a somewhat prophetic comment on future female workforce participation rates, the authors calculate that most are young, unmarried women living at home. 'If it is considered that married women should not be 'occupied', then this group represents the largest untapped reservoir of labour power.' 60.

investors purchasing smaller amounts of War Loan via Post Office or savings bank accounts, where smaller savers' efforts were directed, may create a different picture. But those records are yet to be unearthed. The fact that the state helped itself to a portion of this wealth made it possible to put in place measures aimed at promoting some element of class mobility. This is consistent with the overall picture of inequality prevailing at the outbreak of war in 1914. The gradual and slow increase in women who appear to have earned at least part of their capital through employment is consistent with the gradual narrowing of the inequality gap and the rising participation of women in paid employment.

Men with no stated occupation

Gentleman, Esquire and other Honorifics

One of the great puzzles presented by all three series of War Loan Ledgers is why men who are engaged in professions, occupations and businesses would choose to obscure those and label themselves as 'Gentleman', 'Esquire' or some other honorific such as a Baronetcy or a Knighthood. Table 6 illustrates the role played by this group in supplying capital for war. This group forms the single largest occupation description for men in each of the three samples and by number, forms, by far, the biggest single declared occupation of male retail investors in all three samples. Moreover, this group provided over half of the capital invested by men in the first sample and nearly half the capital from male retail investors in the second sample. Within the male grouping, the ledger sample raises an intriguing question: what did these investors mean, exactly, when they described themselves as 'Gentleman' or 'Esquire'? Did they all mean the same thing? Or did these designations mean different things to different people? If these men had businesses or professions, why did they describe their occupations as 'Gentleman'? The instinctive assumption is that these were *rentiers*; that is, they had enough capital to live on the cash flow it generated. The capital could be in the form of land, property, investable securities or mortgages. However, as this section will show, that was far from the case and these designations applied to an eclectic assortment of occupations, and levels of both educational attainment and wealth.

Table 3.6: The Role of the 'Gent' and his Peers in War Loan

War Loan Sample Series	Number of Male Investors	Number Describing Occupation as Gentleman or Esquire	Percentage of Self-Described Gentleman and Esquire	Value of Total Male Capital (£s)	Value of Capital from Gentleman and Esquire (£s)	Percentage of Male Capital from Gentleman and Esquire	Value of Median Male 'Buy' (£s)	Value of Gentleman and Esquire Median Buy (£s)
3½% 1925–28	1247	687	55.6%	966,457	674,074	69.7%	211	250
5% 1929–47	1124	545	48.5%	1,142,383	781,320	68.4%	300	316
Conv. to 3½%	943	338	35.8%	1,560,941	623,845	40.0%	500	500

Carr-Sanders and Caradog Jones, in their analysis of British occupations based on the 1921 Census – about the mid-point of the entire sample period – found some 390,000 men neither retired nor accounted for at work. 'Some are no doubt idle and some rich, and a small proportion both idle and rich,' they note, adding that while the numbers are most likely small 'this is of course no defence of their existence.'[224] Some of these are certainly part of the sample of gentlemen. These would be members of the *rentier* class: that is, individuals who essentially 'rent out' their store of capital in exchange for a steady income. The assumption is that this class of men need not be gainfully employed because they earn enough from investment income to support a comfortable lifestyle. The genesis of the '*rente*s' lie in medieval Italian city states but emerged in their more modern form in seventeenth century Holland. The term initially at least referred to national debts that were perpetual and had no repayment date. European governments preferred them because they were cheaper than borrowing via loans. 'Both the affluent and those of modest means came to see *rentes* or annuities as an attractive investment, readily available and readily negotiable.'[225]

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[224] Carr-Saunders, Caradog Jones, *A Survey of the Social Structure of Britain*, 59.

[225] John Munro, 'The Medieval origins of the 'Financial Revolution: Usury, Rentes and Negotiability', *The International History Review*, 25.3 (2003) 505-562.

Before 1914, the general view of the *rentier* was that of an individual who had accumulated enough capital to be able to live off income from property (rents), pensions, bonds, interest on savings and capital gains on fixed-interest securities. These need not be very wealthy; many were small savers who had little else to live on. However, through the late nineteenth century, the *rentier* acquired a pejorative tone; it referred to members of an unproductive class and it was mainly through their ownership of land and interest-bearing securities that these individuals did not need to resort to work to support their lifestyle.[226] Thomas Piketty, in his history of the role of capital in Europe and North America from the eighteenth to the twenty-first century, notes that, the nature of the capital was transformed from largely agricultural land at the start of the period to industrial and financial capital by the time of the outbreak of the First World War. Moreover, income from capital accounted for the lion's share of what was earned by the top 1.0 per cent of population measured by wealth in the period 1900–1910. [227] Indeed, the fact that some very high incomes were derived not from labour but from returns on capital led to the differentiation in 1907 legislation between earned and unearned incomes. In 1910, legislation to impose a supertax on the larger incomes – many of which were enlarged through unearned investment income – marked an important structural change.[228] The very fact that law-makers saw fit to impose a higher rate of tax on income from investment than that levied on employment suggests that nationally, a value judgement about the social usefulness of *rentiers* had been made. What is much less clear is the extent to which those who lived wholly or mainly on income from investment, rather than that from labour, were 'Gentlemen'. If the 1911 Census is any guide to that question, the answer is quite unequivocally 'No'. That is because matching these 'Gentlemen' and 'Esquires' with the 1911 Census shows that most describing themselves in this way either were employed, owned a business, or had a profession. This surely was

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[226] Ross McKibbin, 'Political Sociology in the Guise of Economics: J.M. Keynes and the Rentier,' in *English Historical Review* 128.530 (2013), 78–9.

[227] Piketty, *Capital in the Twenty-First Century* 164, 276–8.

[228] Alzada Comstock, 'British Income Tax Reform', *The American Economic Review*, 10.3(1920), 489.

the source of at least some of the income they later invested into War Loan. Very few confessed to living wholly on 'Private' or 'Own' means.

Instead, the presence of 'Gents' and 'Esqs' in the ledger may be more a reflection of the upheavals to Britain's social structure that began before 1914. Although these upheavals were undoubtedly exacerbated by war, they were also a response to industrial and economic change and scientific innovation that were triggered by the first industrial revolution in the late eighteenth century. The predominant role of the 'Gentleman' was inextricably bound up in the historiography of modern industrial capitalism in Britain. Even by the outbreak of war in 1914, the culture of the Gentleman retained its grip on the levers of political, financial and industrial power. The historiography of the Gentleman in the economic history of Britain – not to mention the social history – does not dispute the centrality of the role of the 'Gent'. But rather, it is divided on what role these played in setting the stage for its modern, industrial economy. How individual 'Gents' saw that role, and the value they attached to it, may well have determined whether they self-identified as part of that group.

One perspective on British economic history views the Gentleman as not simply the by-product of an evolving industrial society emerging from a pre-industrial agrarian culture, but rather as the engine of the nation's industrial decline. Among the leading proponents of this interpretation is Martin Wiener. In *English Culture and the Decline of the Industrial Spirit: 1850–1980*, Wiener points a finger at the pre-eminent role of the gentleman in establishing that culture as the antithesis to greedy, grasping capitalism that made other European states grow more rapidly by the end of the nineteenth century than did Britain.[229] Wiener is not alone in attributing the cult of the gentleman to Britain's relative decline as an industrial and economic power in the twentieth century: P.J. Cain and A.G. Hopkins argue for a similar, if more nuanced interpretation. Wiener's contribution, they argue, emphasises the way in which the prevailing patrician order in

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[229] Anthony J. Wiener, *English Culture and the Decline of the Industrial Spirit: 1850–1980* (Cambridge: Cambridge University Press, 1981), 1–7.

the late nineteenth century, naturally suspicious of capitalist values, tamed the emerging industrial middle class which had been boosted by technical and scientific enterprise and discovery. However, they argue that it was service capitalism, including banking and finance, that replaced income generated by land. The 'gentleman' could still claim roots in landed wealth.[230] This suggests that use of the term 'gentleman' – or of its other versions – refers to more than simply income or wealth. Instead, these terms appear to refer to a somewhat elusive concept of social class that was eaten into by the upheavals of war, but whose marginalization was already underway well before 1914. 'Before the war,' writes George Orwell, 'the upper middle-class, though already none too prosperous, still felt sure of itself. Before the war, you were either a gentleman or not a gentleman, or if you were a gentleman you struggled to behave as such, whatever your income might be, he wrote in his 1937 classic *Road to Wigan Pier*.[231] One view of the role of 'Gentleman' was that these formed much of the professional classes and stood as the bulwark protecting Britain's wealthiest against the outrages of the working classes. Harold Perkin cites the common education at public boarding and grammar schools, and their Oxbridge education to a lesser extent, of giving the professional classes a common bond with the wealthiest that ordinary businessmen could not claim. Perkin adds that the sense of superiority among gentlemen over tradesmen and ordinary businessmen was echoed particularly within smaller towns where big businesses were less common.[232]

It is generally the case that wealth – particularly landed wealth – had historically formed part of the concept of being a 'Gentleman'. Rubenstein points out that until the 1880s more than half of Britain's wealthiest men were the great landowners and earlier in the eighteen and nineteenth centuries, that percentage was even higher.[233] But the advent of the Industrial Revolution and the growing role that finance played in the British economy

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[230] Peter J. Cain and Anthony.G. Hopkins, 'Gentlemanly Capitalism and British Expansion Overseas, I.The Old Colonial System, 1688–1850' in *The Economic History Review*, 39.4 (1986), 501–25.

[231] George Orwell, *The Road to Wigan Pier*, (London: Penguin Books, 1937), 113–15.

[232] Harold Perkin *The Rise of Professional Society: England Since 1880 (London: Routledge, 1989)* 123–4.

[233] W.D Rubenstein, *Capitalism, Culture and Decline in Britain: 1750–1990*, (London, Routledge, 1994), 103.

during the late nineteenth century shifted the centre of gravity among the wealthy to the arenas of commerce and finance. Among millionaires in 1900–14, 20 – just over a quarter – had fortunes based in the manufacture of food, drink and tobacco and a further 12.2 per cent had wealth based on commercial activities. Indeed, in an analysis of social class published in 1910, D'Aeth argued that class distinctions had been breaking down in England for decades. The combination of rapid economic development – which created occupations that had not previously existed – along with the rising status of some previously insignificant professions, the growing role of the state in organizing men's lives and the expansion of educational opportunities, were all forcing changes in previously rigid barriers between social classes.[234]

The analysis of self-styled Gentlemen, Esquires and other men whose occupation is not categorised as 'remunerated' by the Census shows just how significant this group were in providing capital from retail investors both during and after the First World War. It is why they deserve special scrutiny. As can be seen in Table 3.6 (above), 'gentlemen' and their peers provided over half of War Loan capital from male retail investors in the first sample, and slightly less than half in the second. What 'Gents' did contribute led to a median investment that was higher than that for the entire male retail sample generally. By the time of the third sample, these self-described 'Gents' were still the single largest 'occupational' category among men, but these were no longer disproportionately large providers of capital. The percentage of capital supplied by male investors, and their representation by number within the sample of men, are broadly equal. In addition, their median holding is about equal to the male sample.

As with female investors, practically the only source of information about the origins of capital for self-described gentlemen is to be found in the 1911 Census. Indeed, the picture of a 'Gentleman' that emerges from the sampling exercise is that of an occupational designation that straddles the line between explaining the source of the income and

[234] D'Aeth, 'Present Tendencies of Class Differentiation', 267–8.

hinting at a set of social aspirations that appear increasingly faint as Britain drew into the 1930s.

Out of 687 Gentlemen, Esquires and other honorifics in the first sample, 50 can be clearly identified in the Census. Only five of these reported their occupation to Census takers as 'Living on Own Means', a status signifying income only from investments. A further three are gentry, two of whom bear the title of 'Earl'. Sir Hugo Meynell FitzHerbert of Tissington Hall, Ashbourne, Derbyshire, is a Baronet who invested £6,300 on 8 December 1914. Charles Constable Curtis of Langford Hall, Newark, Notts., was a co-investor also in December 1914 in £1,400 of War Loan. In the 1911 Census, he is aged 48, married and living with his wife, daughter and six live-in servants.[235] When he died in 1936, his estate, which consisted only of settled land in London, was valued at £425,944.[236] A third, the Right Honourable William Henry Mount Edgcumbe, an investor in £3,000 of War Loan, described himself as a Peer.[237] When he died in 1917, his effects were valued at £206,707.[238]

One group of self-styled gentlemen are a cluster of 16 men who turned out to be brokers on the London Stock Exchange who were not investing on their own behalf but rather, were acting as distributors of others' capital, buying and selling War Loan. This group list their home address as that of the Exchange and all record their disposal of the stock to 'Jobbers', a transaction permitted only to brokers. These account for £61,617 of total investment by men in the first sample with a median investment of £2,600 each. These have been reclassified as 'Institutions' for purposes of the first sample, along with a group of financial institutions, industrial corporations and some not-for-profit bodies. However, not everyone in the arguably thrusting world of stockbroking sought to obscure their source of livelihood. The first sample includes three self-described stockbrokers,

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[235] 1911 England Census, Nottinghamshire, South Collingham, District 2, 7.

[236] England & Wales, National Probate Calendar, 1937, Aaron-Czujiwsku, 109.

[237] 1911 England Census, Devon, East Stonehouse, 284.

[238] England & Wales National Probate Calendar, 1918, Dabbs-Gyte, 158.

two insurance underwriters, three bank clerks and a bank manager and a pawnbroker who will be discussed in the next chapter along with others who disclose their actual occupation. The other self-identified gentlemen have a range of professions, some of which hint at a public-school education and other trappings of the upper middle class. Among these are Charles John Reid, who described himself as 'Esquire' but was in fact a headmaster at Haileybury College. With a family member, he invested a total of £611 in War Loan by June 1915, shortly before he was killed in Gallipoli in August 1915.[239] Charles Edward Sheapheard, was aged 69 in 1911 and a London-based rare book dealer. He lived with his wife and five live-in servants, investing £2,000 in War Loan in January 1915.[240]

Other self-styled gents, however, had more prosaic occupations: Wilfred Cosens Acfield, investor of £1,200 in War Loan in January 1915, emerges as a Signal Engineer in 1911, a profession he apparently stuck with. He is recorded as an employee of the London and North Western Company beginning in 1906 and, at age 48 in 1911, is unmarried.[241] But from 1919, his salary was a handsome £1,100 per year rising to £1,700 annually from January 1926.[242] When he died in March 1948, he left a widow and an estate valued at £11,544.[243] Other 'Gentlemen' included members of the legal profession, a profession that another 48 men in the sample were happy to own up to in the ledgers. Those in the legal profession classifying themselves as gentlemen include five solicitors and two barristers, and all but one preferred to describe themselves as 'esquire'. All had War Loan holdings of £1,000 or more. A group of six gentlemen and Esquires describe themselves as retired from a business or a profession, including one, Walter Brotherhood of

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[239] The Great War: 1915. Old Haileyburians Who Died in the Service of Their Country. https://www.haileybury.com/honour/HAILEYBURY%201915.htm (accessed 18 September 2019)

[240] 1911 England Census, London, Paddington South, 524.

[241] 1911 England Census, Derbyshire, Derby, Derby 34.

[242] UK Railway Employment Records, 1833–1956, Salaried Staff Record Card, 98.

[243] England & Wales National Probate Calendar, Aali-Bywater, 6.

Lanchester, Durham, who had been a workhouse master.[244] Among the Gentlemen and Esquires were nine stockbrokers and a single member of the Lloyds Insurance market.[245] Among the gentlemen's other actual occupations were Linen Manufacturer, retired calico printer and hosiery manufacturer. Thomas Leader of Newmarket, Suffolk and an investor in £500 of War Loan – he bought the 4½% War Loan 1925–45 in October 1915 when the price had already fallen – was identified as a trainer of racehorses.[246] Mr Leader may be an example of upward mobility; 40 years earlier, he had been employed as a groom and lived as a lodger at a cottage in Ely, Wales.[247] Of the group, three invested sums that were equal to, or less than, the median Gentleman's holding of £300, while the remainder were some way above that.

In the second sample covering years 1915–24, it was possible to match 69 self-styled gentlemen out of 545 describing themselves in that way, or just under 13 per cent of the total. Out of this group, only five told 1911 Census takers that they relied on 'Own' or 'Private' means for their livelihood. The investor on 'own means' with the single largest stake of £18,713, appears in the ledger as Gilliat Edward Hatfield and uses a City address at 45 Minories. But a family website identifies him as having inherited a family estate, Morden Hall Park, from his father, Gilliat Hatfield. During the war, he is said to have offered Morden Hall as a place of convalescence for those suffering injuries on the front line.[248] Another large investor on private means is William Wildman Cattley whose occupation in the 1911 Census was recorded as 'None, Retired'. This is one of the many

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[244] 1891 England Census, Durham, Lanchester, District 1 Lanchester Workhouse, 8.

[245] This group has been classified as retail investors because they appear to be dealing for their own account. Their trading pattern appears to be that of a retail investor rather than as an intermediary and their sales are to other brokers, not jobbers.

[246] 1911 England Census, Cambridgeshire, Newmarket, 01 P 336

[247] 1871 Wales Census, Glamorgan, Llandaff, District 37, P 21

[248] The Hatfield Legacy: Then and Now http://fieldsunsown.com/the-hatfeild-legacy-then-and-now/ accessed 16 September 2019)

categories not recognised as remunerative employment by the Census.[249] Mr Cattley, aged 73 in 1911, was living with his wife, an unmarried niece and seven live-in servants when he purchased a total of £14,895 in War Loan. He died in December 1918, leaving behind an estate of £119,848.[250] One clue to the possible source of Mr Cattley's fortune was a notice in the London Gazette on 6 July 1875 announcing the dissolution of a firm of hops merchants and giving notice that he was one of two partners who would be carrying on the business in the future.[251] Robert Darley Guinness, investor in £24,800 in War Loan beginning in 1916, was shown in the 1911 Census as aged 52, married living with his wife, children, brother's wife and family and his widowed 84-year old father. The father is described as a 'retired banker'.[252] Robert Darley himself is described as a founder of the banking firm Guinness, Mahon.[253] Doubtless, inherited funds and connections helped him to establish the bank.

The diversity of the remaining 'gentlemen' as revealed by the Census, is striking: they included two farmers, three solicitors, two barristers and a law clerk and a range of further occupations that might be deemed to be those of skilled workers or tradesmen. These include a pawnbroker and jeweller, an assistant butcher, a master tailor and a brewer. Of the entire group of 'gents' whose actual occupation could be identified by the Census, 56 of the 69 had investments in War Loan of £1,000 or more, far higher than the average for male retail investors generally. Even then, the gents' own fortunes are likely not to have been entirely self-made.

By the time of the third sample covering the post-war years to 1932, the percentage of men describing themselves as 'Gentleman' or similar fell to roughly 36 per cent of all

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[249] Report of the Census, England and Wales, 1921, *Classification of Occupations, XXXII*, Retired or not gainfully employed (London, HMSO, 1921), 90.

[250] England & Wales National Probate Calendar, 1919, Aaron-Cutts, 547.

[251] Notice is hereby given, The London Gazette, 6 July 1875,

[252] 1911 England Census, Warwickshire, Fatington, 14, 12.

[253] John Venn (ed), *Directory: A Biographical List of All Known Students*, Vol. 2 (Cambridge: Cambridge University Press, 2011), 170.

male retail investors. Capital contributed fell to 39.0 per cent. Of these, it was possible to match 74 with the 1911 Census. The single largest investment was made by a Gentleman was one who was living in Grange-over-Sands, Lancashire, who emerged from the third sample and appeared as a retired banker in the 1911 Census. Of those who could be matched in the Census, eight – about 2.4 per cent – described themselves to Census-takers as living on 'own' or 'private' means. A ninth investor who said he lived on private means and who purchased £2,787 of War Loan in June 1921, is described in the Dictionary of Welsh Biography as an author.[254] A tenth investor held a heredity peerage, presumably the source of inherited wealth. A further four were children at the time of the 1911 Census, but their parents held occupations implying access to family wealth. These parents included a farmer with 630 acres who employed 30 men, three women and five boys and another whose father was a property agent. One investor, Jem Ramsay Couper, nominally based in Monmouth, Wales, invested £2,100 in War Loan in 1926, building on an existing holding in government securities. Mr Couper emerges as a professional polo player and horse breeder in Argentina.[255] Records of ships sailing into and out of Britain show he was born in 1904 and that he travelled back and forth to Buenos Aires.[256]

However, the list of self-styled 'Gentlemen' also included a blacksmith, various bank employees, a builder/decorator, the cashier at a shipping firm, a retired gas labourer, the manager of a hardware department, a pawnbroker, a school master and two solicitors. In short, the collection of those describing themselves as 'gentleman' encompasses such a wide variety of trades and implied levels of wealth and education that it challenges any effort to find a unifying theme. Nor do any of these fit Wiener's or Cain and Hopkins' description of 'gentlemanly capitalism'; most apparently embraced profit-making with unbridled enthusiasm.

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[254] Dictionary of Welsh Biography, https://biography.wales/article/s2-VAUG-MIL-1870 (accessed 18 ~September 2019).

[255] Horace Laffaye, *The Polo Encyclopedia 2nd Editition*, (Jefferson, N.C.: McFarland & Co, 2015), 86.

[256] UK, Incoming Passenger Lists, 1878–1960, Dover, England, 1959, May, 1.

One possibility is that those describing themselves as 'Gentlemen' did so because at least some of their income came from land or fixed-interest securities in the traditional sense. Indeed, this becomes a likely explanation considering data which emerged from the so-called Colwyn Committee. That was the informal name given to the Committee on National Debt and Taxation and named for its chairman. Its final report contains data collected by Inland Revenue on payers of what was known as super-tax. These show that a majority of those with high incomes had both *rentier* and earned incomes. The percentage of high earners living only on investment income rose slightly in the post-war years to 29.4 per cent of all high-earning investors in the years 1922–23, from 27.0 per cent of all investors in the 1913–14 fiscal year. At the lower end of super-tax payers – those earning incomes between £10,000 and £20,000 per year – over 70 per cent had some earned income in the years before the war while just under 70 per cent had some earned income in 1922–23. In addition, there was a relationship between income and age; the youngest super-taxpayers aged under 45 years accounted for under 15 per cent of all rate payers. Those aged 66 and over accounted for just under a third of the highest earners.[257] There may be another association with the concept of 'gentleman', this one connected with holding a directorship of a company. In all three samples, there are self-described 'gentlemen' who Census records show held a company directorship. Rubinstein points out that in the years straddling the First World War, most businessmen who held directorships did so only within their own family firms or else in related industries. Even among the wealthiest, few held directorships outside their own field.[258]

The holding of company directorships appears to have been a significant source of earned income both before and after the war. The Inland Revenue data show that for taxpayers earning at least £10,000 per year and upwards, income from directorships was earned by anywhere from 26.8 per cent to 41.6 per cent of the wealthiest in the pre-war years and by a similar fraction in 1922–23. Charles Masterman, chronicler of English culture, was

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[257] *Report of the Committee on National Debt and Taxation*, (London, HMSO, 1927), Appendix XV, 133–137.

[258] Rubinstein, *Capital, Culture and Decline*, 176–78

dubious about the extent to which company directorships constituted serious employment and suggested that many occupying these positions had roles that were purely ornamental. ‘They are too old to learn any money-making trade,’ he writes, describing the decline in the status of these individuals. ‘And their title or honour only obtain them some mean salary as guinea-pig directors on Companies whose managers make no secret of the contempt they hold for their intelligence.’[259] The presumably ‘occupational’ designation of gentleman or esquire, therefore, insofar as it is used by War Loan investors, appears to straddle the line between explaining the source of the income and hinting at a set of social aspirations that appear increasingly faint as Britain drew into the 1930s.

Conclusion

Looked at over the period 1914–32, the biggest source of capital came from men and women whose ledger entries offered no clue as to the ultimate source of their capital. Nevertheless, through use of the 1911 Census and other publicly available materials, it is possible to piece together a general picture of the source of these individual savings. For women, the greatest source of wealth appeared to be that which was inherited albeit, over time, they participated in the workforce in occupations and professions allowing them to acquire significant savings for investment. For men, the shift was starker. However, one thing is clear: that the biggest single ‘Occupation’ among men – that of gentleman, esquire or some other honorific – did not describe those of similar professional or business achievements. Rather, it implied that a certain level of wealth had been achieved – a level attested to by the savings available to be invested in War Loan – with a wide range of levels of educational attainment, professional skill and business acumen within the groups. One thing is most certainly clear; these self-identified ‘Gents’ were not a group of idle *rentiers* living off incomes from inherited wealth alone. The majority were engaged in profit-making businesses and professions and, given the sums available for investment, they appear to have pursued capitalism with relish. The fact that the percentage of self-described ‘Gents’ declined as a percentage of both male retail investors

[259] C.F.G. Masterman, *England After the War*, (London: Hodder and Stoughton, 1923) 65.

and as capital providers over the 1914–32 sample period may be pointing towards a changing economy in the post-war period. That is, demands for economic success increasingly required skills sets that derived less from the social and physical capital and more from those acquired over a lifetime. War forced technological innovation on Britain in ways that it had not previously, and it altered Britain's role at the centre of global trade. Finally, it must be considered that describing oneself as a gentleman may have been as much an aspirational designation as a statement of one's relative place in the hierarchy of class. As opportunity for class mobility incrementally increased in the post-war period, the need to identify oneself as a gentleman may not have been as fierce as it had once been.

Even though a large swathe of the investors' sample does not include a specific description of an occupation, large numbers of those included did, in fact, own up to a specific occupation, profession or business. In the next chapter, I will look at what various occupations tell us not only about the ultimate source of investors' capital, but also about the granular and intimate portrait of the incremental change in the distribution of wealth that occurred in Britain during and after the First World War.

CHAPTER 4
Where did the Capital come from?
Investors with a Stated Occupation

In this chapter, I will turn to the group of investors who have listed a specific occupation, profession or business within their ledger entry to form an understanding of individual sources of capital. Although a large – but decreasing – proportion of investors do not describe their own remunerative work, there are a sufficient number of those who do. The fact that the sample is five times larger than that required for a 95 per cent confidence level has made it possible to conduct this analysis. In this chapter, I will show how the role of those engaged in professions or businesses that were likely to have been enabled by inherited capital was particularly significant at the outbreak of war in 1914, but gradually became less significant in the afterwar years. However, those in occupations likely to have been the beneficiaries of demand for war-related goods and services during 1914–18 appear increasingly as contributors to capital. This chapter is crucial in trying to answer the core question at the heart of this research; where did investors' capital come from?

Classifying Occupations

For the purposes of analysis, the occupations by which investors describe themselves in the ledgers have been sorted into four very broad groups. In very general terms, occupations are grouped with those requiring similar levels of educational attainment for entry or require similar levels of access to capital for participation. Male retail investors have been sorted into twelve occupational sub-groups, with a thirteenth added for those who listed no occupation and did not classify themselves as 'gentleman', 'esquire' or the bearer of some honorific title. For the purposes of general analysis, these occupations have been linked under wider occupational headings.

The broad headings for various occupational groups are set out below in Table 4.1.

Table 4.1 Broad Classification for Men in Named Occupations

Professions	Religion, Legal, Military, Medical, Engineering, Finance, Educated Professionals
Manufacturing, Retail, Extractive	Merchants, Salesmen, Distributive Trades, Farmers, Fishermen
Skilled Labour Trades	Skilled Labour and Trades
Not given	Not given

Within these broad groups, certain patterns emerge. Professional occupations, including those of engineering and a general group whose required level of educational attainment is more modest than that for traditional professions, become significantly larger providers of capital over the entire 1914–32 sampling period. Some of the narrowing of the gap in income inequality may be seen in the rising percentage by number and by capital – albeit from a very low base – coming from men in occupations of skilled labourer and tradesmen.

Table 4.2: Male Investors in Broad Categories of Occupation, By Percentage of Investors, Percentage of Capital

Professional Category	3½% War 1925-28		5 % War 1929-47		Converted 3½%	
	% of Investors	% of Capital	% of Investors	% of Capital	% of Investors	% of Capital
Professions	14.1	11.8	15.7	25.7	13.0	25.6
Manufacturing, Retail, Extractive	7.6	8.1	9.5	6.2	10.4	11.6
Skilled Labour and Trades	4.0	2.2	4.6	1.9	6.4	3.5
Not Given	0.6	1.4	1.6	2.3	1.6	1

This chapter will look generally at the four broad groups, but within each, will break down the key occupations and where available, draw on data about wages and salaries for those occupations. It will also look at changes in demand for services of various occupations and professions and compare those with investment in War Loan. It will also use calculations of median individual investments in War Loan by occupation as a guide to the levels of capital available within each. What this chapter will show is that demand for the services of certain professions changed sharply over the period: demand for clergymen's services fell while that for solicitors and accountants rose. This shift in demand reflects the radical changes that war, and its aftermath, imposed on Britain's economy. As British industry consolidated, demand for managerial skills rose and employment reflected measures to improve access to education put in place before 1914. The world of work changed in many ways in the period around the First World War. This included the sharp rise in the number of salaried employees, the increase in demand for the professional services of lawyers, doctors, civil servants and clerical administrators; and the growing presence of a skilled managerial class who could oversee a shift to large-scale industrial development.[260] This will be reflected in the shifts in capital devoted to War Loan by members of different occupations over the 1914–32 sample period. But it will also point to the way in which occupations and businesses directly involved in the supply of goods needed for war were able to earn sufficiently large profits that could be turned into cash, and then into War Loan, in the years after. Finally, it will show increasing participation in War Loan by investors engaged in occupations at the edge of the working class who, given the increase in wages within certain groups, were likely to be entering the ranks of investor, possibly for the first time. The chapter offers a granular view of the process outlined by various studies on income and wealth inequality that point to a small and gradual improvement in living standards for the working classes.

The professions as a group

For purposes of analysing the source of investors' capital, I have grouped together several types of work to enable comparisons between investors. Of these, the single largest is that of the four primary professions of clergy, medical, legal and military occupations. The contributions these make to the male retail investor base by number and by capital contributed are set out in Table 4.3. These account for 16 per cent of male retail investors by number but 12 per cent of capital contributed to War Loan in the first sample. By the time of the third sample, this group accounted for 11 per cent of male retail investors and a roughly equal percentage of capital invested in War Loan. Even though this group are a declining percentage of male retail investors in War Loan, they remained significant providers of capital. To put this into perspective, less than 0.1 per cent of employed men

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[260] Routh, '*Occupation and Pay in Great Britain,* 3; Marwick, *The Deluge,* 342–343; Perkin, *The Rise of Professional Society,* 281–2; Waites, *A Class Society at War,* 153.

were in these four professions in 1926.[261] Engineers, although often included in groupings of professionals, are counted separately because of the disparate nature of what constituted engineering work over the years 1914–32. These are 3.0 per cent of male retail investors in the first sample but contribute less than 1.0 per cent of capital. By the time of the third sample, that has dramatically reversed, with that profession accounting for, again, 3.0 per cent of the sample but over 14 per cent of capital employed in War Loan. In the third sample, a single very large investment from a family of mining engineers may have skewed the role of that profession in providing War Loan capital. Adding together the contributions to capital from the four 'classic' professions with those of the newly emerging professions, these constituted over a quarter of all male retail investors by number at the end of the sample period and nearly 38 per cent of the capital. This compares with under a quarter of investors by number in the first sample and just 15 per cent of capital. The breakdown of the contribution these professionals make, set out by the percentage of their numbers in the sample and the percentage of capital contributed, can be seen in Table 4.4.

The four primary professions of clergy, law, medicine, military

The next section will discuss each of the four 'classic' professions of clergy, law, medicine and the military fared during the years 1914–32, including changes in salary and remuneration. It will explain the factors that are likely to have contributed to changes in the relative investment in War Loan carried out by each group over time. When looked at in the context of investments by other men in named professions, this group forms a large, but declining percentage of investors by number and by percentage of capital provided.

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[261] Carr-Saunders, and Carradog Jones, *A Survey of the Social Structure of England and Wales*, 57–58. The authors cite Frances Gaw et al. *A Study in Vocational Guidance Carried Out by the Industrial Fatigue Research Board and the National Institute of Industrial Psychology,* (HMSO,1926).

Table 4.3 Professions: Clergy, Law Military Medical as Percentage of Male Retail Investors

War Loan Sample		% of Investors	% of Capital	Median (£s)
3½% War 1925-28	Clergy	4.05	2.07	200
	Law	4.05	6.05	500
	Medicine	3.89	2.00	300
	Military	4.05	2.06	211
Total		16.04	12.18	
5% War 1929-47	Clergy	3.47	1.80	200
	Law	4.53	16.77	300
	Medicine	2.76	2.20	100
	Military	7.73	8.43	100
Total		18.49	29.20	
Converted 3½%	Clergy	2.22	1.44	471
	Law	5.19	5.57	849
	Medicine	1.80	2.13	700
	Military	2.22	1.57	547
Total		11.43	10.71	

Although the median size of individual investor's War Loan purchases rises significantly over the 1914–32 sample period, the relative contribution from this group becomes less important.

Clergymen

In D'Aeth's analysis of pre-war social classes, the classical professions generally – and these four in particular – were in fact an appendage, as he put it, to 'the gentry' who were part of highest social class in Britain. Professions 'provided occupations for the younger sons of the gentry and the sons of professional men. The professional man was almost always a blood relation of the landed gentry.'[262] To the extent that family ties can be verified in Census data, that tendency is evident. In the following sections I explore each of these classical professions in turn, showing that although they had earned income with which they could buy War Loan, they were also likely recipients of inherited wealth.

[262] D'Aeth 'Present Tendencies of Class Differentiation', 268–9.

Clergy in all three loan samples are a homogenous group; they are overwhelmingly Church of England; however, several large investors are officials of the Roman Catholic church. Very few clergy holdings are greater than £1,000 and London-based clergy are nearly absent from each sample. Given the dominance of London as the single largest source of capital for the first War Loan series, it suggests that clergy may have had different investment objectives from other professionals. Clergymen represent 2.4 per cent of retail investors in the first War Loan sample and these collectively accounted for just 1.6 per cent of retail capital. The median investment by clergymen was £200, slightly below the £211 per head of the average male retail investor for that series. By the time of the 5% War Loan 1929–47, clergy accounted for 2.0 per cent of retail investors and only 1.4 per cent of capital. By the time of the post-war sample, clergy were even less significant as retail investors; they were only 1.2 per cent by number and 1.0 per cent by the value of capital held.

In the second and third samples, median 'buys' were also below the male averages. The relative decline in participation in War Loan by clergy needs to be seen in perspective; while this profession was the single largest of any profession in 1911, numbers reduced by 1921; in that year, they were only 85 per cent of their numbers as at 1911.[263] John E. Allen notes that clergy lost out on the so-called Tithe Rent Charge, effectively a tax on the value of agricultural produce within a parish, which had been rising strongly even before the war. But Parliament set a seven-year ceiling on the charge beginning in 1928 so that parishes could see no further benefits from rising crop prices.[264] And while on average clergy incomes rose in nominal terms between 1913/14 and 1922–24 – average incomes in the later years were 161 per cent of levels in 1913–14 and the rise was smaller than that for any other professional group, save engineers. In fact, the Bishops of the Church of England did worse when their incomes are looked at net of expenses. Overall,

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[263] Routh, *Occupation and Pay in Great Britain,* 14–5.

[264] J.E. Allen, 'Some Changes in the Distribution of the National Income During the War' *Journal of the Royal Statistical Society,* 83.1 (1920): 101.

incomes fell from an average of £3,400 in 1913–14 to £2,700 in 1924.[265] When clergymen investors can be identified in the Census or national probate records, there is some evidence of inherited wealth. This helps to explain the size of some of their War Loan holdings relative to their modest salaries. Moreover, several showed that spiritual devotion did not interfere with their ability to act as canny investors; the ledgers show several buying War Loan when prices were cheap and using conversion features to offload once-unsaleable stock. Only a handful of clergymen within each of the three samples made very large purchases; within the first sample, the single largest was made by one of the three London-based clergy, Reverend Prebendary Hanmer William Webb-Peploe who was the head of a two-man investor group. Reverend Webb-Peploe was a prominent Church of England clergyman and evangelical, and the son of another prominent clergyman who was also Prebendary at St. Paul's, Onslow Square and a Select Preacher at Cambridge in 1896.[266] In the 1911 Census, he was aged 73, living in South Kensington with his wife, an unmarried daughter and four live-in servants. His wife and daughter are described as living on 'private means'.[267] He and his co-investor bought £3,000 of War Loan in December 1914 and converted it to the more attractive 4½% War Loan 1925–45 in November 1915. At his death, he left an estate valued at over £52,000.[268]

The second issue of War Loan attracted a £4,175 investment from Reverend Lawrence D.D. Gaughran, the Roman Catholic Bishop of Meath in Ireland, who financed the purchase by converting some 4½% War Loan stock he and his co-investors already

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[265] Routh, *Occupation and Pay in Great Britain*, 64–5.

[266] I.T Foster, 2004 "Peploe, Hanmer William Webb (1837–1923) Church of England clergyman and evangelical", Oxford Dictionary of National Biography, (Oxford: Oxford University Press) http://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128–e-47130 . (accessed 16 September 2019).

[267] 1911 England Census, London, Kensington, Kensington South, 30, 78.

[268] England & Wales National Probate Calendar, 1923, Laband-Pywell, 481.

owned into the new and more attractive 5% issue.[269] Another significant clergyman investor was Reverend Alexander Cowe of St Leonards-on-Sea, Sussex, who purchased £2,000 in 4½% War Loan with conversion rights (cum rights) in August 1915, adding to his stake by converting £999 of once-unsaleable 2½% Consols and arranging a further conversion of older stock so that his holding peaked at £4,090. In 1921, at the height of the deep post-war slump, the Reverend sold £2,614 of stock, while transferring the remainder to a new ledger. The final sample includes an investment of £10,004 from an investor group led by the Reverend Henry Grey Graham, Auxiliary Bishop of the Roman Catholic Diocese of Edinburgh, Scotland who made two purchases in 1921 and 1922 at the height of the economy's collapse and when War Loan was trading at a deep discount.

The presence of inherited wealth among clergymen investors looks even more probable when the investments of their offspring and wider family are considered. The most spectacular example in the ledgers is probably that of Agnes Beatrice Jane Thicknesse, a widow living in Peterborough, Northants who invested £400 in 5% War Loan. The ledgers show she was widowed at the time of her War Loan investment, but in the 1911 Census, she was the wife of a bishop 30 years her senior.[270] And, compounding the impression that female capital was amplified through the practice of assortative marriage, the 1881 Census showed she was then 23, living with her parents, two sisters and two live-in servants in Barnack, Northants. Her father's occupation is given as Canon of Serknorth (sic) and Rector of Barnack.[271] When she died in December 1944, she left an estate valued at £53,191.[272] Investments by other offspring of clergy add to the impression that this was a profession financed, in part, by inherited wealth.

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[269] Thom's Official Directory of the United Kingdom of Great Britain and Ireland, *Ireland City and Regional Directories: 1847–1946* (1919), 460, Accessed 16 September 2019. He is listed as 'Gaughran, Most Rev. Lawrence D.D., Bishop of Meath, Mullingar'. https://www.ancestry.co.uk

[270] 1911 England Census, Northamptonshire, Peterborough, 11, 640.

[271] 1881 England Census, Northamptonshire, Peterborough Minster Close Precincts, District 36, 7.

[272] England & Wales National Probate Calendar, 1945, Saaler-Tyzack, 335.

Medicine

Like clergymen, medical professionals were a distinct investor group, albeit with a wider range of qualifications and job titles. In addition to those describing themselves as 'medical doctor', the group includes several who gave their title as 'surgeon', 'physician' 'medical practitioner', FRCS (Fellow, Royal College of Surgeons) and 'MB', a credential associated with a Bachelor's degree in medicine. The sample for each of the three series includes several dentists, veterinary surgeons and an optician. Like clerics, medical professionals made up a declining percentage of male retail investors over the sample period. Guy Routh points out that some of the fluctuations in the pay of medical professionals may well reflect forces at work in respect of other professions as well. For one thing, the First World War destroyed the lives of a higher proportion of young men engaged in the professions than it did the lives of others. This may have led to a disproportionate reduction in the numbers of young men employed in this profession.[273] But the sample of medical professionals differed from that of clerics in other respects. In particular, except for those buying the 3½% War Loan 1925–28, the median 'buy' of this group was higher than the £211 of male retail investors generally. Medical professionals had a median buy of £300. In the second sample, the median investment for the medical profession is £600, twice that for men generally. Of 31 practitioners, 11 had holdings of £1,000 or greater while only two have holdings of £100 or less. By the time of the third sample, the median holding of medical professionals has risen to £700, compared with the median of £500.

Explanations for the investment pattern may be found in the salaries data for the profession, although there are wide dispersions within it. In 1913–14, the median salary for a doctor was £370, but the top decile of doctors would command an average of £1,140 each, while those at the lowest quartile could expect salaries of £155 annually on average, setting their incomes at a point too low to attract income tax at that time. However, salaries for the medical profession rose sharply over the next decade, particularly for

[273] Routh, *Occupation and Pay in Great Britain*, 63.

those in the lowest quartile. By 1922–23, salaries for the lowest paid doctors were 225 per cent of those prevailing in 1913–14.[274]

That may help to explain why there were relatively high concentrations of investors holding £1,000 or more each; while little better than 10 per cent of the first sample of 46 medical professionals held £1,000 apiece, that rose to a third of the second sample and nearly half of the final sample.[275] The single largest investor amongst medical professionals was Herbert Tilley, a surgeon, who listed premises in London's Harley Street, and who became a widely known expert in otology and laryngology.[276]. Dr Tilley purchased £2,000 of War Loan in late April 1915 as the price was falling and sold it in September. The next single largest holding was made by another surgeon, John Selfe Lush of Market Lavington, Wiltshire, who purchased 3½% War Loan in December 1914 and who was still holding on to it at the time records were transferred to new ledgers in November 1918.

As is the case of clerics, identifying wealth invested in War Loan that may have been inherited is impossible without detailed investigation of probate records. The general assumption is that professions such as medicine that required extensive education were only likely to be pursued by those whose parents were wealthy enough to educate them privately. Dentists neither earned as well as doctors nor did their average salaries rise as much; in 1913–14 and in 1922–23, the top decile for that group was not far off that of doctors. But for those at the median and in the lowest quartile, the increases in wages

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[274] Routh, *Occupation and Pay in Great Britain*, Table 29, 62.

[275] C.L. Mowatt, *Britain Between the Wars: 1918–1940*, (Cambridge: Cambridge University Press, 1985) 19 who cites G.D.H. Cole, *History of the Labour Party since 1914*, (New York: St. Martin's Press, 1972), 39-40, 44-61. The sum of £1,000 has been set as the size of a large holding throughout this research. The sum is arguably arbitrary and very large relative to median salaries. However, when the Labour Party proposed a capital levy on wealth to pay down the national debt in 1918, it planned to exempt holdings below £1,000.

[276] 'Royal College of Surgeons: Parr's Lives of the Fellows', https://livesonline.rcseng.ac.uk/ (accessed 22 May 2019).

were more modest than those for doctors and surgeons. In none of the three samples do dentists figure among those holding £1,000 or more in War Loan.

Military

Military professionals constitute the third group of investors in the professional class, and their participation rates and contributions of capital appeared to reflect the patterns of war. Although average salaries for army officers in 1913–14 were the lowest of any of the four professional groups, by 1922–24, the percentage increase at 229 per cent, was higher than that for any other similar profession save barristers.[277] Military professions accounted for 2.4 per cent of all retail investors in the first sample but only brought 1.6 per cent of the capital. By the second sample, the percentage of retail investors in military occupations rose to 4.5 per cent of the sample and accounted for 6.4 per cent of capital raised. By the post-war period, however, the percentage of Military professionals had fallen to 1.1 per cent of retail investors and capital contributions had fallen to a similar level. Among all three samples, there are two striking characteristics; first, the investors in all three samples – except for a single army pensioner in the post-war sample – carry high ranking titles. These are Captain, Colonel, Army Major, Lieutenant Commander. Second, there appear to be a high percentage of investors based in London within the first two samples. Out of 45 military professionals investing in the 3½% War Loan 1925–28, over half – 24 of 45 – have a London address while 34 of 61 Military Professionals appear to be London based in the second sample. After the war, both the number and capital contributions from Military occupations drops sharply as does their London presence. However, the heavy proportion of London-based Military is more likely to reflect the fact that two specialist military financial institutions, Cox & Co and Holt and Co, set up to serve the armed forces in the eighteenth and nineteenth centuries, were simply handling investors' financial affairs.[278]

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[277] Routh '*Occupation and Pay in Great Britain 1906–60,* 64.

[278] Lloyd's Banking Group, Our History, https://www.lloydsbankinggroup.com/Our-Group/our-heritage/our-history/lloyds-bank/coxs--kings-army-agents/. (accessed 21 May 2019).

Within this category, only three investors are clearly identified as having died in combat in the First World War. In the first sample, Captain James McBain Ronald of Canterbury, Kent, purchased £500 of 3½% War Loan in March 1915. He was a noted cricket player and a member of the East Buffs Regiment, Kent and died less than a month later on his thirty-ninth birthday in a battle north of Ypres.[279] He is commemorated on the Menin Gate there.[280] Captain Edmund Henry Herbert Westby of Belgravia, London, Adjutant with the 1st Battalion of the Welsh Regiment, was wounded and Missing in Action on the Western Front as at 26 May 1915. His death, at the age of 33, is recorded as of that date.[281] In the second sample, a single military death is recorded, that of Lieutenant Walter Ralph Barrett whom the 1911 Census identified as an 18-year old student at Cambridge.[282] It is not clear whether Mr Barrett was a military professional but he has been classified as such since it appears to be his only occupation in adulthood. After investing £200 in War Loan in September 1917, Lieutenant Barrett is either conscripted or voluntarily enrolled in the Army and is killed at Gaza, Palestine a few weeks later in November 1917. Probate records show his estate was not settled until October 1919, with proceeds to a Miss Aimee Wellesley, Spinster and presumably a fiancé.[283]

The contrast of average war salaries even for army officers with the size of median investments in War Loan suggests that many – if not most – had some form of inherited wealth. The median investment for military professionals in the first sample is £406 compared with £211 for male retail investors. By 1917, when the group was much larger and accounted for 5.4 per cent of all male retail investors, the median holding was £361 against an average of £400. Nevertheless, that group included 13 of 62 investors whose

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[279] Andrew Renshaw, *Wisden on the Great War: The Lives of Cricket's Fallen: 1914–1918*, (London: John Wisden and Co, 2014), 174.

[280] Interment.Net, Cemetery Records Online, Menin Gate Memorial, Surnames R, http://www.interment.net/data/bel/menin-gate-memorial/records-r.htm. (accessed 19 September 2010).

[281] Imperial War Museum, Bond of Sacrifice – *First World War Portraits Collection*, Catalogue Number HU 127290 https://www.iwm.org.uk/collections/item/object/205390591 (accessed 19 September 2019).

[282] 1911 England Census, Cambridgeshire, Cambridge, St Andrew the Great, 11–13, 50.

[283] England & Wales, National Probate Calendar, 1919, Aaron-Curtis, 178.

purchase was for £1,000 or more, including that of Major General Honourable Edward Archibald Brabazon Acheson, a son of Archibald Acheson who was the third Earl of Gosford and his wife, Lady Theodosia Brabazon, and is likely to have had inherited wealth. He gained the rank of Major-General in the Coldstream Guards and died in 1921.[284] Major Acheson did not apparently make his largest purchase during the war; it is recorded as having been bought in two lots on 20 October 1920 totalling £22,221. By the time of the post-war sample covering the years 1920–1932, military professionals were a much smaller percentage of male retail investors. However, the median investment, at £800, was still considerably larger than that of the average male retail investor at £500.

Law

The sampling exercise paints a picture of legal professionals as those with significant personal capital available for investment in War Loan. In the first sample, legal professionals were 2.4 per cent of all retail investors but provided 4.7 per cent of capital. By the second sample, legal professionals were 2.7 per cent of retail investors but provided 12.7 per cent of capital. By the post-war period, legal professionals were 2.5 per cent of male retail investors and provided 3.8 per cent of capital.

This picture of available wealth may however be misleading. Routh points out wide disparities between incomes for different categories of legal professionals. The dividing line was between barristers who are entitled to represent clients directly before the courts and solicitors who handle client's commercial affairs. At the outbreak of war, the top decile of salaries for barristers, at an average of £1,820 per year, topped that of solicitors at £1,410. But by the end of the war, the upper reaches of barristers well exceeded those of solicitors, with the highest decile of the former averaging £3,450 per year against £2,413 for solicitors. Nevertheless, the top range of solicitors appear to have been very well paid, not only when compared with salaries in Britain as a whole, but even when compared with those of other professionals such as doctors and dentists.[285] The pay scales

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[284] The Peerage Website, http://thepeerage.com/p22256.htm#i222553 (accessed 19 September 2019).

[285] Guy Routh *Occupation and Pay in Great Britain,* 62.

differed between those employed in the private sector and those on the public payroll; High Court judges, for example, were paid £5,000 per year in 1913 but were left to suffer the post-war effects of inflation. That level remained unchanged in nominal terms until after the Second World War. County Court Judges, relative to barristers, also saw real pay shrink; in 1913/14, these were earning 220 per cent of barrister's upper quartile. By 1922/23, that had fallen to 111 per cent.[286]

Avner Offer, in his history of British property law, points out that there were effectively class barriers to a lucrative position as a legal professional; required exams covered subjects that those with an ordinary elementary school education would never have been taught.[287] However, as noted above, the legal profession begins to stand out for its contribution to investment by the time of the second sample. This group bears closer inspection. Legal professionals were more likely than any other to consist of groups of two or more investors. Within the legal profession in the first sample, 27 of 51 investors – roughly half – have at least one other name on the account. This is unusual. Across the entire first sample of 1,235 men, only 266 have a second investor – roughly a fifth – and of these, the majority – 70 per cent – share a surname. By the time of the third sample, three quarters of legal professionals had at least one co-investor and of these, only a quarter share a surname.

This relatively high percentage of seemingly unrelated co-investors in the legal profession may explain why investment balances are so much higher than those of other professionals. The trusts and estates which were formed in response to rising tax burdens during the 1914–32 period required the work of legal professionals. These investments may reflect not so much lawyers' personal holdings as those of wealthy individuals hoping to avoid tax. Not surprisingly, then, the sampling exercise for those in the legal profession points to some extraordinary pools of wealth and income, particularly among

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[286] Routh, *Occupation and Pay in Great Britain*, 65.

[287] Avner Offer, *Property and Politics 1870–1914: Landownership, Law, Ideology and Urban Development in England* (Cambridge: Cambridge University Press,1981), 14–15

those captured within the second sample covering years 1915–1924. It was during those years that EPD was set to capture outsized war-related profits being earned by industry and increasingly the source of political and industrial unrest. However, this did not apply to individual earnings and partnerships. Legal firms, organised as partnerships, did not face the pressures to hold reserves that businesses did. Legal professionals accounted for 3.8 per cent of male retail investors and for a roughly equivalent – 3.62 per cent – of the capital invested in the first sample, with the list heavily dominated by the higher-earning solicitors. These were 37 of 50 within that grouping and with that, solicitors accounted for seven of the 10 investors whose purchases totalled £1,000 or more. The single largest investor was Arthur Henry Foster, a Birmingham-based solicitor who purchased £11,500 in 3½% War Loan in two separate lots in January 1915.

Within the second sample, the role of the legal profession as a provider of capital was even more prominent. While this group accounted for 2.6 per cent of all retail investors – and 4.4 per cent when women are excluded from the count – it provided 12.7 per cent of retail capital and nearly 17 per cent of male retail capital. The total was inflated by a relatively small number of very large investments. Of the 48 investors in this group, 21 bought 5% War Loan 1929–47 valued at £1,000 or more. This group provides testimony to the role of inherited wealth in the professions. The largest holdings were made by investment groups rather than by individuals. The single largest holding was by a group led by Charles Edward Keyser, who, according to Alumni Cantabrigians 1922–58, was the only son of a London stockbroker who attended Eton and was engaged in various enterprises in the City of London. He is described as particularly interested in ecclesiastic architecture and was a generous and prolific donor to museums and schools. The ledger shows he lived at Aldermaston Court, Aldermaston, Berkshire, and that he purchased £104,000 beginning in March 1920 first by converting existing holdings of bonds presumably less attractive than the 5% War Loan 1929–47.[288] Another large investor

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[288] John Venn, *Alumni Cantabrigienses: a biographical list of all known students, graduates and holders of office at the University of Cambridge, from the earliest times to 1900 (1922–1954)*, Vo 4, Part 2, (Cambridge: Cambridge University Press, 2011), 34.

group is that led by Charles George Orlando Bridgeman, which purchased £40,849 in War Loan beginning in 1920. Mr Bridgeman gives his address as Lincoln's Inn, Holborn, next to the Law Courts, although this was most likely his place of work. The ledgers suggest he was already an investor in government stock; the purchase is part of a portfolio amalgamation with an existing holding. According to an obituary appearing in *The Times* on 29 December 1933, Mr Bridgeman was the son of a cleric but descended from the second Earl of Harrow, attended Trinity College, Cambridge and was called to the Bar in 1876. He served in London for over 50 years as a chancery and conveyancing counsel.[289] In the 1911 Census, he was aged 58, married, with a daughter and son and five live-in servants. Probate records from 1934 show his effects at death being worth £13,949 (resworn).[290] One individual making a significant investment on his own without the benefit of a larger group was the Right Honourable Sir Horace Edmund Avory, who describes himself as 'Judge'.[291] Sir Horace invested £5,500 in October 1917 by converting existing holdings into the more attractive new issue. His obituary in *Time Magazine* on 1 July 1936 identified him as 'The Hanging Judge' for the number of men he sent to the gallows each year, including the man it describes as 'that misguided Irish patriot, Sir Roger Casement'. It notes he was tagged 'Acid Drop' for his sentencing. His obituary in *Time Magazine* was decidedly unflattering; he was described as 'Scrawny-necked, thin-lipped, slit-eyed and fearsome on his high bench in Old Bailey.' He, too, appears to have inherited wealth; his father was Henry Avory, clerk of the Central Criminal Court.[292]

By the post-war period, the legal profession remained a significant contributor to capital for War Loan, but its relative size and participation were less outstanding. Of the 49 investors in the group, 23 had holdings of £1,000 or more each. The single largest of

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[289] *The Times*, 29 December 1933.

[290] England & Wales National Probate Calendar (Index of Wills and Administrations), 452.

[291] National Portrait Gallery: https://www.npg.org.uk/collections/search/person/mp00187/sir-horace-edmund-avory. (accessed 19 September 2019).

[292] Foreign News: Tears for Acid Drop, *Time Magazine*, 1 July 1936, http://content.time.com/time/magazine/article/0,9171,770029,00.html. (accessed 17 September 2019).

these was a £11,914 stake held by two Liverpool-based solicitors, Frederick Gregory and Frederick Charles Gregory, apparently relatives sharing both a surname and an address, whom the ledgers show had already been buyers of War Loan but transferred from an existing portfolio. Another large buy of £7,201 came from a Manchester-based investor group led by a solicitor, Frederick Stancliffe. His co-investor, Frederick William Walton, initially described his occupation as 'Cotton Broker' in the ledger, but crossed it out in favour of the designation 'Gentleman', pointing to the fluidity with which male investors assigned occupational titles to themselves.

Other educated professionals: finance, engineering, generic educated professions: These three groups deserve examination on their own for two reasons; first, entry to these professions often required lower levels of educational attainment than entry to those of the four 'classic' professions associated closely with gentlemanly capital. Second, these are professions for which demand grew significantly in the post-war period as British industry consolidated and became increasingly able to exploit new technologies.

The following Table illustrates the growing role that this group of professionals played as War Loan investors and attests their growing wealth, albeit from a very low base, during the afterwar period. By the third sample, the spectrum of male professionals, in total, accounted for just under 38 per cent of capital contributed by male retail investors, up from 15 per cent in the first sample. The totals shown in the table are expressed as a percentage of all retail investment, excluding that of institutions, represent the relative percentages by number of investors and of capital contributed when both 'classic' and 'newer' educated professions are aggregated. I will take each of these in turn to analyse what might account for the changes in relative War Loan participation by occupations.

Table 4.4: Other Male Professions Chart: Banking & Finance, Engineers, Educated Professionals*

Samples		% of Investors	% of Capital	Median (£s)
3½% War 1925-28	Banking, Finance	1.05	0.47	100
	Engineers	2.83	0.77	100
	Educated Profs.	3.89	1.77	200
Sub-Group		7.77	3.01	
Total		23.81	15.19	
5% War 1929-47	Banking, Finance	1.69	2.63	461
	Engineers	2.04	1.10	308
	Educated Profs.	4.63	0.92	100
Sub-Group		8.36	4.65	
Total		26.85	33.85	
Converted to 3½%	Banking, Finance	4.66	4.62	594
	Engineers	2.86	14.24	500
	Educated Profs.	7.10	8.24	400
Sub-Group		14.62	27.10	
Total		26.05	37.81	

* All professions shown as a percentage of male retail investment

Finance

Distinguishing between those finance professionals investing for their own account and those acting as distributors of capital by their respective institutions was made more difficult by the propensity of many to list their occupation as ‘Gentleman’ or ‘Esquire’. Only in cases where the pattern of buying and selling clearly indicated that the investor was a banking firm or a stockbroking partnership, or where the name of the individual cropped up frequently as a broker, were these characterised as institutions. In the first sample, these constitute 0.6 per cent of all retail investors by number and even less by the percentage of capital invested. The median size of each stake, at £100, was less than half that for men generally. By the time of the second sample, finance professionals account for roughly 1.0 per cent of all retail investors by number but 2.0 per cent by capital contributed and the median investment, at £461 is above the male median of £400. By the time of the third sample, finance professionals account for just under 3.0 per cent of retail investors and a percentage just above it in terms of capital raised. But their median holding, at £594, is higher than that for men generally. One possible explanation for the increase in the percentage of finance professionals by the time of the third sample may be related to the gradual decrease in both the number of, and capital value of, those describing themselves as Gentleman or Esquire; that is, any possible stigma attached to the active pursuit of wealth through trading stocks was diminishing.

The first sample contains only nine finance professionals as investors. This includes a group of two stockbrokers apparently acting for their own account. In one case, the co-investor is a family member. It also includes three bank clerks, a bank manager and a single pawnbroker. There are two investors buying stakes of £1,000 or above of which the larger is a £1,200 purchase by Isidore Greenwood in a group including a manufacturer and a widow. The purchase is made in two blocks, one in May 1915 and one a month later, a time when the price of the 3½% War Loan 1925–28 is already falling. However, rather than convert to the more attractive 4½% War Loan 1925–28, the investment is left sitting on the books until records are transferred over to new ledgers in November 1918. By the time of the second sample, finance professionals are more numerous – there are 19 of them – and six are purchasers of £1,000 or more. The single largest of these is an investment totalling £7,800 from Alan Margetson, a Lloyd’s of London broking underwriter. This appears to be for his own account rather than that of his institution because one of the purchases is made via conversion of existing stock and all transactions occur over the period of more than a year. Also, in the group is a Grimsby-based pawnbroker, Thomas James Beeson, who invested a total of £695 in two separate purchases and in 1921, began transferring his stake to Deed Stock. For investors living far from London, Deed Stock offered lower transaction costs (Chapter 5). Mr Beeson was certainly middle class but hardly a top financier; when he died in March 1929, he left effects of £2,522.[293]

In the third sample of finance professionals, the group consists of 44 individuals, just under a quarter of whom are stockbrokers, and which includes a stockbrokers’ manager. The single largest investor among these is a Glasgow-based group led by an investor who

[293] England & Wales National Probate Calendar, 1929, Aaron-Axe, 250.

had already purchased War Loan, and whose balance was transferred in December 1920 with assets of £10,955. It rose to a total of £12,255 before the investor began selling it off in June 1925 and disposed of it completely by November of that year. Investors with bank-based employment – these were typically managers or clerks – accounted for 20 of the 44 investors, and the single largest of these was a Lancashire-based cashier from Southport. He transferred in an existing holding of £4,316 in September 1925 and dissipated it by October of that year.

As a group, finance professionals do not appear especially wealthy; not only is the median investment lower than that for men generally but 21 of the 44 – nearly half – have invested £500 or less. As wider investment choices became available, it would be expected that those specialising in finance would be well placed to judge future risk-adjusted returns of a wider spectrum of investments. It is possible that War Loan did not appeal to this group as it did to those whose wealth came from land or industry.

Engineers

The historic role of engineering through the nineteenth century was that of a trade for skilled or semi-skilled workers. However, demands on the shipbuilding and engineering sectors during the war had pushed up wages for this group. Routh makes the point that as the application of engineering skill was increasingly applied to industrial processes, the pay and numbers employed in engineering rose.[294] In the official 'Census 1951: *Classification of Occupations*', Engineering is listed among those described as 'Class 1A, Higher Professions', a group which included solicitors, clergy and medical and dental practitioners.[295]

But there is some ambiguity. To avoid confusion, the 'Engineer' category in the sample only includes those investors who have used the word 'engineer' to describe their occupation. To give an idea of the possible distribution of engineering employment in

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[294] Routh *Occupation and Pay in Great Britain,* 30.

[295] Routh, *Occupation and Pay in Great Britain*, 156.

1951, just under 10 per cent of these workers are classified as either 1A, 1B or 2, corresponding to higher professional (equal to that of clerics or barristers), lower professionals such as nurses, teachers and draughtsmen or that of clerical workers.[296] Mostly, the remainder fall into the semi-skilled worker categories. But by the time of the third sample, two exceptionally large investments by those describing themselves as ‘engineer’ pull the comparative contribution of capital by this group out of all proportion to that of other professionals.

Within the first sample, 23 of 36 investors simply label themselves ‘engineer’ in describing their occupation. However, the remaining investors carry a wide variety of descriptions from that of civil engineer to engineer draughtsman to mining engineer. None of the group have an investment of £1,000 or larger, and only two have investments of £500 or more. One of these is Louis William Smith, an engineer from Lincoln, Lincolnshire, who invested £500 in 3½% War Loan in January 1915. In the 1911 Census, Mr Smith was aged 32, married with two young children and had two live-in servants.[297] But the official record of his training goes some way towards explaining why he could afford live-in help and investments. In 1905, Mr Smith sought official designation as a mechanical engineer. His school transcript describes seven years of education at what is likely a primary school, followed by several apprenticeships. In all, Mr Smith’s schooling took nine years and three months before he became a mechanical engineer.[298] Roughly half of all engineer investments were for the minimum £100 and only two were for £500 each. Only one totalled £1,000. The extremes of wealth that characterised traditional professions are not evident in the case of engineers. To illustrate the complexity of the engineering profession, consider Herbert William Lewin, an investor who bought £100 of the 3½% War Loan in December 1914 and converted it to the more attractive 4½% War Loan the following October. In the ledger, Mr Lewin is listed as a ‘Motor Engineer’. But the address he gives at the time of the investment, in Wye, Kent, is mostly likely that of

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[296] Routh, *Occupation and Pay in Great Britain*, 39.

[297] 1911 England Census, Lincolnshire, Lincoln, 10, 505.

[298] UK Mechanical Engineer Records, 1847–1938, Typescript with notes 1905–06, 27.

his parents. His father, also William Lewin, was listed in the 1911 Census as Assistant Secretary, South East Agricultural College, and the father of only one child.[299] In the 1901 Census, William, Lewin, and his son, Herbert William were living at the same address. William Lewin's occupation was Private Schoolmaster.[300] In the 1911 Census, Herbert William Lewin was living in Cambridge, married and the father of two young children. His Occupation was given as 'Private Means' and Civil Engineering, Lieutenant Army Motor Vehicle Reserve (Regular). His wife was listed as living on Private Means, as are his mother-in-law and sister-in-law.[301] When Herbert William Lewin died in 1917, he was described as an OBE and a retired lieutenant colonel. He left effects totalling £39,291.[302] Thus, 'engineer' was a definition that could include members of the middle class as well as from the working classes. The second sample covering years 1915 to 1924 includes only 23 engineering investors, 13 of whom describe themselves simply as 'Engineer'. Five of these invested more than £1,000 each. Cecil William Jones is recorded as the largest of these, buying a total of £3,500 in War Loan, with an initial purchase via allotment in 1917 and a further £3,000 early in 1920. In the 1911 Census, Mr Jones was aged 47 and living in Tewkesbury with his wife, son and daughter and one live-in servant. Census records list him as 'engineer and boilermaker'.[303] Mr Jones, too, appears to have been a beneficiary of an apprenticeship system. In the 1881 Census, Mr Jones was aged 17 and living in the home of an Ironmonger to whom he was apprenticed.[304]

It is in the third sample of the Engineering Professionals that the signs of Britain's shifting economy are most evident. Like the previous samples, most investors simply describe themselves as 'Engineer', giving little hint as to the actual job function or the industry in which they are employed. However, it is a single investment by two related

[299] 1911 England Census, Kent, Wye, 01, 238.

[300] 1901 England Census, Kent, Wye, District 1, 24.

[301] 1911 Census, Cambridgeshire, Cambridge, St Andrew the Less, 25, 624.

[302] England & Wales National Probate Calendar, 1948, Kaas-Myson, 142.

[303] 1911 England Census, Gloucestershire, Tewkesbury, 05, 2.

[304] 1881 England Census, Worcestershire, All Saints, District 7, 11.

individuals, Frank Robert Simpson and John Simpson. In the 1891 Census, Frank Robert Simpson was aged 26, married and a mining engineer. He was the father of a daughter, Stella.[305] He and John Simpson, who also describes himself in the ledger as a mining engineer, invested a total of £207,199. It is the biggest single holding by a retail investor in the entire set of all three samples – that is the most telling. The two indicate that they are trustees for a deceased father for at least one of the mining engineers, and the sum is transferred in from another ledger some months after the father's death. The father was not only a mining engineer but a coal mine owner as well. This investment is discussed later in the next chapter as an example of how capital, invested in war-related industries, was recycled into War Loan after those industries were no longer able to earn rates of return comparable to those in wartime.

Of the group of investors classified as engineers – including that of the mining engineers – six of 27 had investments of £1,000 or larger. One group, led by William Birkinhead Mather Jackson, a mining engineer from Chesterfield, Derbyshire in the East Midlands began buying War Loan in May 1927, accumulating £4,100 and assenting to a cut in the coupon to 3½% in 1932. Another investor group, led by an engineer based in Newcastle upon Tyne, acquired £2,100 beginning in 1924 while a third, from Sheffield in Yorkshire, built a stake of £1,200 beginning in 1923. All the largest investments by engineers are based in the north ast or east Midlands, the heart of the mining industry.

Educated Professionals

The grouping of 'educated professionals' has been set apart from that of the traditional professions because these include some occupations that did not require levels of training as prolonged as those for law or medicine. As a group, it is small, but it deserves a closer look on its own because of what it points to in a Britain where the demand for skills appears to be boosting the incomes and wealth of those of the lower middle classes. This includes occupations such as schoolmaster, accountant or architect. It also includes professions which saw demand rise for trained personnel with managerial skills as British

[305] 1891 England Census, Staffordshire, Burntwood, District 14, 53.

businesses consolidated after the war. While the grouping of educated professionals accounted for 2.3 per cent of retail investors in the first sample – and a paltry 1.4 per cent of capital contributed – that had risen to 2.7 per cent of investors but had fallen to 0.7 per cent of capital in the second sample. But by the post-war period, educated professionals were 7.3 per cent of all male, retail investors and, relative to their numbers, were significant buyers of War Loan. In the third sample, they provided 8.4 per cent of all the capital from male, retail investors. Although the median buy for the group in the third sample, at £400 each, is lower than that for men generally, the increase in their participation as investors points towards a change in the wealth and status of those who would once have been at the edge of the lower middle class.

Some of this can be seen in the ledgers through the participation of accountants, a nautical examiner and several writers. In the first sample, 14 of 48 investors are some form of accountant. A further 11 are architects and/or surveyors, five are schoolmasters and one is a teacher. The group also includes an artist, an actuary and an actor. Only five of the group have investment holdings of £1,000 or more. Of these, the largest is an investor group led by London-based Architect, William Edward Clifton which purchased £2,600 in War Loan in early December 1914. The group sold its stake in November 1917. All the other significant investors have holdings of just £1,000 each and two of these are also surveyors. The median holding for the entire group in the first sample is £200, below the £238 median for men generally and the lowest for any professional group in that sample except for religious professionals. By the time of the second sample, the participation of educated professionals has widened and by number, these account for 4.2 per cent of male retail investors. However, these provided just 1.0 per cent of capital raised and the median investment, at £100, is not only well below the average for men, it is also lower than the median investment for women. Within the group, eight are employed as schoolmasters or some other function associated with education, six have titles indicating they are civil servants and seven are accountants in private industry. Of the 51 educated professionals in the second sample, just two have War Loan holdings of over £1,000 each.

By the post-war period, the group has widened further. Of these, ten were either schoolmasters or teachers. The remainder included six investors – including a postmaster – whose occupation indicated they were civil servants or on the public sector payroll. The diverse group also included two draughtsmen, an auctioneer, a variety artist, a journalist and a publisher. Just under 10 per cent of the group have holdings valued at £1,000 of War Loan, three of which are for more than £5,000 each. The single largest investment of £7,416 was that by an Edinburgh-based publisher using funds transferred in from another ledger. Another large stake is that held by a Liverpool-based analytical chemist, a profession likely to have seen acute demand for its services during war because of the role of chemicals in explosives. In the post-war sample, accountants figure prominently: there are 17, equal to a quarter of the group. That these should figure so prominently may not be surprising. An analysis of how the pay of members of various professions had changed between 1913–14 and 1922–23, contained in an annex to the Colwyn report, noted strong gains in pay for accountants. 'It is not an unexpected result, when regard is paid, inter alia, to the heavy and increasing demands which have been made upon their profession in connection with the great development in taxation and finance since 1914'.[306] A further five describe themselves as managers or managing directors. Of the group, 21 had holdings in War Loan of £1,000 or more, of whom eight are accountants. Of all educated professionals, the far biggest holding is that of an investor whose occupation is listed as 'company director' and who purchased £65,638 in stock, mostly transferred in from an earlier investment.

The reason for taking a closer look at this relatively small group of investors is because of their emerging role in Britain's economy. They were a growing group even before the advent of war. Perkin describes the trend as a natural outgrowth of the industrial revolution and the process of specialization that encouraged consolidation and mergers within sectors. As organizations grew increasingly complex, they needed an army of accountants, managers, clerks and administrators to operate efficiently. The professional classes formed one side of a divide down the centre of Britain's middle classes, but these

[306] *Report of the Committee on National Debt and Taxation*, (London: HMSO, 1927), Table 21, 104.

grew rapidly. Between 1880 and 1914, there were 39 new professional organizations covering professionals such as chartered accountants, auctioneers and estate agents.[307] Early in twentieth century Britain, ladders to the professional classes were created in the education system, first through passage of legislation creating new secondary schools in 1902 and second through creation of a scholarship system in 1907. By 1914, only 5.6 per cent of British elementary school children went on to secondary schools. But by the interwar years, a higher proportion of British elementary school children would go on to secondary schools or higher education than was the case anywhere else in Europe.[308] The expansion of the participation of educated professionals as War Loan investors points towards the effects of two trends that have been well documented by economic historians; that first, Britain's post-war economy, as it expanded to exploit scientific and technical innovation, needed a much more highly skilled workforce. Second, the remuneration offered to those with those skills was increasingly generous. The expansion of War Loan investment in the post-war period to those in occupations previously little seen points toward the changing nature of work in Britain and offers a granular look at how this happened.

Manufacturers, distributive tradesmen, farmers

The group of investors engaged in manufacturing, the distributive trades and farming are all conducting diverse businesses. Indeed, there is a perhaps only a single common thread running between them; that is, each one included individuals who were well placed to benefit from shortages of capacity, of supply and from an excess of demand for certain commodities from government wartime purchasing. Many investors – but certainly not all – were engaged in businesses that they would have found difficult to profit from had they not had a store of capital available at the outbreak of war. For at least a portion of these investors, some capital was likely to have been inherited, although many were well placed to profit from war-related activities in any event.

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[307] Perkin, *Rise of Professional Society*, 123.

[308] Perkin, *Rise of 'Professional Society*, 220–221.

Table 4.5: Manufacturers, Distributive Tradesmen, Farmers as a Percentage of Male Investors, Capital*

		% of Investors	% of Capital	Median (£s)
3½% War Loan 1925-28	Manufacturers	2.35	3.56	500
	Distributive Trades	8.26	5.42	300
	Farmers	2.19	1.41	500
	Total	12.79	10.39	
5% War Loan 1929-47	Manufacturers	1.87	0.95	300
	Distributive Trades	9.79	4.82	300
	Farmers	4.80	2.44	206
	Total	16.46	8.21	
Converted to 3½%	Manufacturers	2.23	2.74	1,000
	Distributive Trades	14.00	10.65	469
	Farmers	5.20	2.19	500
	Total	21.42	15.58	

* Expressed as a percentage of male retail investment

Manufacturers

Manufacturers emerge from the sampling exercise as among the wealthiest investor groups. These are only 1.4 per cent by number of retail investors in the first sample but provided 2.8 per cent of the capital invested in War Loan. The median 'buy' among manufacturers was £500, more than double that of the male median and larger than the £250 for Gentlemen. The largest manufacturing investor was John Caddick-Adams who purchased £10,000 in the 3½% War Loan in January 1915. In the 1911 Census, he was identified as aged 65, married and operating a tile manufacturing company in which he also employed a son.[309] Other large investors in 3½% War Loan include Theodore Martin, a manufacturer in Huddersfield, who invested £5,000 in May 1915 when securities prices were falling. The 1911 Census showed Mr Martin to be aged 33, married with a son, daughter and six live-in servants. He was listed as a manufacturer of worsted cloth.[310] Thomas Downie, the Falkirk-based owner of an iron foundry – where demand for output for Scotland's shipbuilding and engineering industries was driving business –

[309] 1911 England Census, Staffordshire, Newcastle-under-Lyme, 03, 630.

[310] 1911 England Census, Yorkshire, W Riding, Lindley cum Quarmby, 19, 506.

invested £2,000 in War Loan in December 1914, but converted that into the more attractive 4½% War Loan by September 1915.[311] Of the six investors in the first sample who do not name the product they are making, five were identified in the census; three of these were in the textiles industry which saw soaring demand in wartime. The other two are makers of earthenware and cutlery. Not all manufacturers in the first sample are making war-related products; the list includes a piano manufacturer and another making straw hats.

By the time of the second sample, the percentage of manufacturers fell to only 1.1 per cent of retail investors by number and an even smaller 0.7 per cent of capital provided. This is during the period described as one of capital hoarding. Demand for capital during wartime, combined with the effects of EPD, encouraged companies to allocate a higher percentage of their profits to reserves to be used to finance repairs and pay for expansion. Profits were also set aside to pay for EPD which first began to bite in the 1917/18 fiscal year.[312]. The largest investor in this group was Herbert Coates, a rope twine manufacturer from Cardiff, Wales, who invested £4,000.

By the third sample, manufacturers bounced back to 2.7 per cent of male retail investors by number but accounted for 4.4 per cent of capital invested in War Loan. It is clear that this is a group with capital to invest; it is hard to imagine how manufacturing could have been organized without access to capital and it is unlikely that many could have operated if loan capital was the sole source of it. Of the group, 12 of the 26 manufacturers invested £1,000 or more in War Loan. Of these, seven were manufacturing products whose nature could not be learned. But in the third sample, evidence of war-related profits emerges. Out of this group of 23, 14 have investments of £1,000 or more and four of these are engaged in metals manufacturing which would have been boosted by war demand. A further four are in textiles manufacturing, an industry which benefited greatly from government contracts to outfit soldiers during the war (see Chapter 5). Similarly, Samuel

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[311] 1901 Scotland Census, Falkirk; ED: 16A, Line: 23, Roll: CSSCT1901_156

[312] Waites, *A Class Society at War*, 99.

Henry Renshaw, who identified himself in the ledgers as a Cotton Waste Spinning and Manufacturing plant owner based in Garstang, Lancashire was the investor in £5,800 in War Loan that was held before the 1927 date it was transferred into the ledger in the sample. Less clear is whether Mr Renshaw owned the stake in his own name or that of his company, S. Renshaw & Sons; the ledgers indicate that funds had been transferred to personal from company ownership. Mr Renshaw assented to a cut in the coupon to 3½% in July 1932. Also, among large manufacturing investors is Sir Alexander Walker, who lists his home address as that of John Walker & Sons, Kilmarnock, Ayrshire and his occupation as 'distiller'. He is a member of the family producing Johnnie Walker whiskies whose holding totalled £5,000 before it was amalgamated with other family investments in March 1931. Manufacturers proved to be a small group by number of investors who became particularly active in War Loan investment during the years 1920–32. Some of those with the largest holdings were engaged in production of goods which benefited most from wartime dislocations in price and demand. Looking at the role of manufacturers suggests that a certain portion of capital invested in War Loan is recycled excess war profits. This theme will be explored in the next chapter.

The Distributive Trades: Merchants, salesmen, brokers and retailers:

This group of those engaged in the distributive trades defies simple categorization. Throughout the 1914–32 period, this group grew as a percentage of all male retail investors. However, the number of male investors in this sector was always greater as a percentage of total male retail investment than the relative contribution of their capital. Within the first sample, this group accounts for 4.9 per cent of retail investors but 4.2 per cent of capital. The median buy was £300, slightly above that for men more generally. By the time of the second sample, the percentage of men in this category rose to 5.6 per cent of male retail investors but their capital representation was only 3.6 per cent. The median investment was £300, in line with men generally. By the third sample in the post-war years, the number in this group rose to 6.8 per cent of male retail investors while capital provided is roughly equal at 7.1 per cent. Their median buy, at £469, was slightly below that for men generally.

The single largest investor within the first sample is a group led by James Charles Kimmins whose address is Ryeford Hall, Gloucestershire the site of which had previously been a girls' school run by his family.[313] Mr Kimmins, who describes himself as a Commercial Merchant, was recorded in the 1911 Census as a corn merchant, aged 60, living with his wife, unmarried sister, daughter and 15 boarders. His sister's occupation is given as Retired Schoolmistress and that of his daughter as Schoolmistress. The boarders are students.[314] His two co-investors may be using some inherited wealth to make their purchases. The group make an initial purchase of £1,000 in January 1915, but then make two further purchases in April and July 1915, as the price was falling and conversion into the new 4½% War Loan was announced.

Many of the remainder of this group were 'intermediators', handling the sale of goods between producers and wholesalers or between wholesalers to retail consumers. The balance of job titles and the goods being intermediated varies significantly over the entire 1914–32 period. In a broad generalization, those whose occupation is 'merchant', 'broker', or 'factor' – terms that suggest they are intermediating between wholesalers and producers – have larger holdings of War Loan than those whose job title suggests they are intermediating directly with retail customers. Among the latter group are those whose occupations are given as 'grocer', 'draper' and 'baker'.

In the first sample, for example, 27 of 102 investors describe themselves as a 'Merchant' of something, selling goods from coal to fruit to timber. There are also several provision or produce merchants. Within this group of merchants, nine have investments of £1,000 or larger. Of these, the largest are two holdings of £4,000 each, one from an investor based in Boyle, County Roscoe, Ireland and the other from one in Leith, Scotland. One large investor is Henry Edward Aked as head of an investor group based in Bradford and which waited until May 1915, as War Loan prices were falling, to make its £1,100 buy.

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[313] British History Online, 'Stonehouse: Introduction,' 267–73 https://www.british-history.ac.uk/vch/glos/vol10/pp267-273 (accessed 19 September 2019).

[314] 1911 England Census, Gloucestershire, Stonehouse, 02, 354.

The Loan was converted into 4½% War Loan at the end of October. Mr Aked was in the 1911 Census as a 49 year-old, married wool merchant living with his wife, four daughters and three live-in servants.[315] Overall, within the merchants, salesmen and middlemen group, 19 have investments of £1,000 or more.

In the second sample, 42 of 107 investors had occupational titles such as 'agent', 'broker', 'dealer', 'factor' or 'merchant' implying they are intermediaries for wholesalers. Of these, nearly a third – 13 in total – have investments in War Loan of £1,000 or more. The largest holder is William James Hall, who gave his occupation as Leather Merchant, investing £2,000 in March 1917 and a further £2,000 a year later. James Boyle, a yarn merchant based in Leeds had an equally large stake in War Loan and Reginald Torrans Cunningham, a cotton broker from Liverpool, is not far behind with a stake of £3,910. By looking at the patterns of investment within this group, those with the largest investments in War Loan appear to be intermediating in goods for which both demand and price soared in wartime. These include purveyors of wool, wine and leather.

By the time of the third sample, the fortunes of those who had benefited from wartime scarcity were clearly on display. The sample found that 48 of 132 investors described themselves as some form of merchant, broker or agent. Of these, 19 had War Loan holdings of £1,000 or more. The single largest described himself in the ledger as a wool merchant, Thomas Taylor Ackernley, living in Bradford, Yorkshire, whose total investment was £10,000. A provision merchant from Stoke-on-Trent, in Staffordshire, Harry Scrivner Adams, led an investor group with a £9,000 holding while an oil merchant based in Glasgow held £8,275 in War Loan. Aside from the merchants, this group also includes four investors – three from Glasgow alone – who give their occupation as 'ship owner' and who had War Loan investments ranging from £5,000 to £8,000 each. The remaining investors are purveyors of goods from groceries, to fish, to real estate although many do not identify what they are distributing. It is significant to note that through all three samples, some of those with the largest holdings of War Loan are intermediating

[315] 1911 England Census, Yorkshire-West Riding, Harrogate, 01, 206.

products that came under direct or indirect government control during the war. Wool, timber and hides were among the staples most commonly purchased by government during the war, while rubber sales could only be made subject to licence. The command by the state over supply and distribution of these goods led to sharp rises in price.[316]

Those War Loan investors whose occupational titles suggest they interact with consumers directly appear to have had more modest holdings. In the first sample, 39 of 102 investors – nearly 40 per cent – listed occupations that fall into this category. These include nine chemists/pharmacists, eight drapers/clothiers, and eight grocers. The single largest investment of any of the group is £1,000 from John James Fox of Forest Gate, London, who described his occupation as 'salesman'. He is the sole investor in a retail-facing business with an investment of £1,000 or more in that sample. In the second sample, 36 of 107 investors appear to be retail-facing intermediaries including 11 grocers, four drapers and a bookseller. In the second sample, those with retail-facing clients have slipped slightly as a percentage of the group to around 31 per cent. Out of a total of 114 investors, 35 operate retail-facing businesses. Of these, 11 are grocers, five are chemists while four are butchers. Only two of these – John Robert Schofield, a grocer living in Keighley, West Riding and Robert Atkinson, a dairyman from Belfast – have investments in War Loan of over £1,000. In the third sample, 49 of 130 investors list occupations implying they operate retail-facing businesses. These include 12 grocers, two jewellers and two 'credit drapers' who sell clothing on instalment. However, the distribution of War Loan holding for this group gives some credence to McKibbin's assertion that for all the outrage generated at the thought of profiteers in society, the closest most people got to that breed in the post-war years was through their local grocer or butcher.[317] By that time, the number of those with holdings of £1,000 or more was 16 of 49 retail-facing businesses, a third of the total. The largest investor among them was a Bradford-based jeweller with a stake of £6,658 in War Loan. The second largest investor was one of the

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[316] Morgan, *Studies in British Financial Policy,* 50–2

[317] Ross McKibbin, *Classes and Cultures: England 1918–1951* (Oxford: Oxford University Press, 2000), 55.

credit drapers, this one based in Stockport, Cheshire. He bought £4,000 of War Loan beginning in 1925. This suggests that in the post-war years, the profits to be made in retail-facing businesses were on a par with those acting as intermediaries between producers and wholesalers. It is possible that, with the abatement of wartime demand and government efforts to direct supply, the margins for scarce commodities contracted.

There is another distinct subset among the group of middle-men; these are engaged in occupations highlighted by Josiah Stamp as accruing excess profits due to unsettled conditions at home. Wartime caused massive dislocations of population as people moved to either decamp to military units or to take up better paying employment in fast-growing war industries. That caused footfall to rise swiftly in some places where it had previously been static.[318] In the ledgers, this group are in occupations such as 'licensed victualler', 'publican', 'lodging house keeper' and 'hotel proprietor'. In the first sample, this group consists of seven of the 107 middlemen, none of whom have War Loan holdings greater than £1,000. The single largest is a £500 investment by Tom Roger Hugh Bailey, a licensed victualler living in Leicester, Leicestershire. By the second sample, the number of investors in this occupational group has risen to 12 of 114. Of this group, only one has a holding of over £1,000. William Butler, operator of the Swan Hotel in Birmingham was already an investor in government stock when he transferred £1,474 in to purchase 5% War Loan in February 1917, and added additional purchases to bring the total invested to £1,900 by May 1924 when his records were transferred to a new ledger. In the third ledger sample, six of 133 investors were engaged as licensed victuallers, one of whom, based in Manchester, had a War Loan holding of £2,000. Overall, the results suggest that while the profitability of businesses that gained from rising footfall was likely to have risen during wartime, those gains were much diminished after war ended and unemployment rose sharply.

[318] Josiah Stamp, *Taxation During the War*, (London: Humphrey Milford, 1932), 148–149. Stamp particularly identifies 'businesses dependent on *local* custom, hotels, cinemas, breweries.'

Professional salesmen, many hired to travel around Britain while selling goods, emerge as a growing occupation over the years 1914–32. In the first sample, 14 of 107 investors were travelling salesmen. These included, for example, Edwin Trudgian, a commercial traveller from Moss Side, Manchester, who purchased £2,000 of War Loan in January 1915 and converted it to the new securities in July of that year. Mr Trudgian was a salesman of linen products, a commodity whose price rose sharply during wartime.[319] At the time of his death, he left an estate valued at £29,724.[320] The second sample saw a slightly smaller percentage of middlemen engaged as travelling sales agents, none of which had holdings of £1,000 or more. By the third sample, only 10 travelling sales agents emerge.

By the years 1920–1932, the number of investors in the overall category of merchants, retailers and middlemen had grown to 133, a larger group even than that of the four core professions. Moreover, the range of occupations appears to reach even further down the hierarchy of wage earners. Of the investors engaged in retail-facing businesses, five are shop assistants in grocery or chemists' shops. The two grocer's assistants, William Kenyon and Wilfred Russell one based in Prestwich, Lancashire and the other in Kippax, Yorkshire, invested £437 and £200 respectively in 1926 and 1927. The chemists' assistants, one in Barrow-in-Furness and the other in Manchester, invested £200 and £100 each in 1928 and 1925. A general shop assistant from Stourbridge, Worcestershire, invested £500 in November 1926 and assented to a cut in the coupon in 1932.

To conclude, the shifts in the investment patterns in this group of men employed in the distributive trades illustrate the shifting balance of wealth and income that clearly shows up in studies by Bowley, Stamp and Atkinson and cited in the previous chapter.[321] The changing pattern of the investments to include those totalling hundreds of pounds by

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[319] 1911 England Census, Lancashire, South Manchester, Hulme, 49, P 290.

[320] England & Wales, National Probate Calendar, 1925, Taaks-Zweerts, P 134

[321] A.B. Atkinson, 'Trends in the Shares of Top Wealth Holders in Britain 1923–1981', *Oxford Bulletin of Economics and Statistics*, 51.3 (1981), 315–32.

those with incomes among the lowest of manual workers suggests that a more even distribution of wealth began after the war. But perhaps more importantly, they point to the mechanisms through which war profiteering worked; those engaged in sourcing and selling commodities and goods for which demand was distorted by war were likely to have been the beneficiaries of rising prices, even if that had not been their intention. Those intermediaries with capital enabling them to interact between producers and wholesalers appear to have profited more, generally, than those selling to retail customers. Those intermediating in goods which were eventually singled out for government controls on price and quantity appear to have done even better.

Farmers and fishermen

Farmers were about the smallest group of investors in the first sample of War Loan. For the purposes of this study the definition of 'farmer' includes that of 'market gardener' of vegetables, farm labourer, farm bailiff and contains a single instance each of a tea planter, a horticultural institute instructor, and a fisherman. In the first sample, farmers constituted just under 1.3 per cent of all retail investors and an even smaller 1.1 per cent of total capital contributed. But by the second sample, the percentage of male retail investors labelling themselves 'Farmer' rose to 2.8 per cent of all retail capital roughly equal to the 1.9 per cent of capital coming from this group. Significantly, the median 'buy' of investors in the first sample was among the highest of any occupation at £500 each, but by the second sample, this had fallen to £206 per investor, below the average for men generally. By the third sample the percentage of Farmers in the sample had widened but capital accounted for only 1.5 per cent of the total. However, the median 'buy' for Farmers, at £500 each, was in line with that for men generally.

Some of the material about the role of farmers is discussed in the next chapter because of the link between war and profits in the sector. Arthur Marwick notes that the outbreak of war was accompanied by very sharp increases in prices of foodstuffs, some of which was produced by British farmers. Compared with the previous year, prices for flour in February 1915 were 75 per cent above previous levels, home-produced meat had risen

6.0 per cent, and sugar had risen 72 per cent.[322] Britain's overall agricultural policy was no different from that towards industry generally at the outbreak of war. 'Business as Usual' prevailed until the fall of the Asquith government at the end of 1916. Peter Dewey notes that the widespread view that farming in Britain was highly profitable was reinforced by the post-war trend of tenant farmers purchasing their freeholds from landlords in very large numbers. However, his research suggests that an abrupt change in government policy at the end of 1916 meant that profit-making among farmers was likely to have been much more nuanced. Certain aspects of their costs rose sharply too.[323] While Dewey concludes that 'super-normal' profits were achieved during the war, the biggest gains occurred in the first few years and had peaked by 1917. The new food production policy set minimum prices for wheat and oats and ate into farmer's profits.[324] After the war, an agricultural depression set in. Hicks notes that falling prices were a long-standing feature of the sector in Britain and pre-dated war. But the speed and efficiency with which foreign producers began to be able to compete with home-grown British produce made it hard for domestic farmers.[325]

Dewey's research on farming profits during the war makes clear that some forms of farming were more profitable than others. In some instances, where a farmer-investor can be found in the Census, more detail is achieved. In the first sample, five of 25 Farmers have investments of £1,000 or more, the largest of whom is William Irish of Ashburton, Devon whose purchase of £2,000 in War Loan was made in January 1915. He sold £800 of his stake in July 1915 and converted the remainder to the more attractive 4½% War Loan.

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322 Marwick, *The Deluge*, 83.

323 Peter E. Dewey, 'British Farming Profits and Government Policy during the First World War', *The Economic History Review*, New Series, 37.3 (1984): 337–9.

324 Dewey, 'British Farming Profits', 384.

325 Ursula Hicks, *The Finance of British Government 1920–1936*, (London: Humphrey, Milford, 1938), 87–88.

The second sample of 57 investors includes the first farm labourer, an occupation whose wages would have been raised by the late-1916 legislation. William Daniels of Bishops Frome, Worcestershire, purchased £100 of 5% War Loan 1929–47 through the conversion of an older security and held onto it after the accounts were moved to a new ledger. Of this investor group, nine have holdings of £1,000 or more. The single largest of these was made by William Herbert Page of Colchester, Essex, who made two separate purchases of £5,000 each in March 1917 and in July 1919 after the war had ended. The 1911 Census offers hints that Mr Page was an already wealthy man in 1917. In it, Mr Page is a 'farmer & dealer', married with two sons and two live-in servants.[326] In fact, an earlier Census from 1871 makes inherited wealth even more likely; then, Page was an 11-year old living with his parents. His father, Isaac Page, is described as a Cattle Dealer.[327] Probate records at Isaac Page's death in 1899 do not reflect extraordinary wealth: effects were £1,741.[328] But William Herbert left his sons a relative fortune. Probate records show both sons survived the war and inherited £54,665 at his death in July 1938.[329] William Rook, a York-based Farmer, acquired £4,100 in War Loan as at March 1923 via an inheritance. He transferred his holding to Deed Stock shortly after obtaining the title. In the third sample, there are two investors who describe themselves as employees; the first of these, from Cornhill on Tweed, Northumbria, is a Farm Servant who purchased £600 of War Loan in September 1928 and, the ledger shows, agreed to a cut in the coupon in July 1932. The second, a Farm Labourer from Swansea Valley, Monmouthshire, invested £100 in War Loan in July 1923. He, too, assented to the coupon cut. A higher percentage of Farmers in the third sample had investments of £1,000 or more when compared to the earlier samples. The single largest of these was a £3,100 holding by a tea planter based in Upper Assam India. A farmer from the town of Thornhill, Dumfriesshire, Scotland made an investment of £3,000 in May 1925.

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[326] 1911 England Census, Essex, Great Horksley, 08, P 44

[327] 1881 England Census, Essex, Boxted, District 7, P 12

[328] England & Wales, National Probate Calendar, 1899, Nabb-Rynne, 40.

[329] England & Wales National Probate Calendar, 1938, Laban-Pywell, P 694

Overall, the results of samples of War Loan investors occupied in farming point towards a sector that was highly profitable during the war years, thanks to soaring commodities prices and guaranteed minimum prices for a period after the war. Forced to extend some of its improved fortunes to lower waged workers, farmers might then have been encouraged to extract capital as agricultural prices fell after the war.

Skilled Labourers and Tradesmen

There is a consensus in the literature that wages for the working classes – particularly those at the lower end of the working classes – rose during and even after wartime, largely under the pressure of labour shortages. 'The working-class in 1914 was large and it was poor,' Marwick wrote. 'In the early twenties, it was not quite so large, and it was not quite so poor,': a pithy and accurate summary of the participation by skilled labour and craftsmen as investors in War Loan. Waites, relying on analysis by Bowley and Stamp notes that the data suggest that the concentration of real incomes for saving or spending in the hands of the wealthiest is lower than it had been before the war.

Calculations by Bowley and Stamp point to improved living standards for manual workers between the years 1914 and 1921, a trend which included the cut in weekly hours to 48 from 55 in the pre-war period. Taking the cut in hours worked into wage considerations, the improvement of one percentage point of the share of national income between 1911 and 1924 – from 43 to 44 per cent – would have been meaningful.[330] Waites cites other data suggesting that the biggest gains went to labourers on the lowest wages; unskilled workers at railways, for example, earned 91 per cent of their 1913 wages back in 1886, but by 1920, they were 330 per cent of 1913 wages. For skilled workers, the comparable movement was 240 per cent of what they had seen in weekly earnings in 1913.[331]

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[330] Waites *A Class Society at War*, 124, A.L. Bowley, J. Stamp, J (1924) *The National Income 1924*, (Oxford University Press 1924), 50.

[331] Waites, *Class Society at War*, 132, citing J.W.F.Rowe, '*Wages in Practice and Theory'*, 1928, (London: G. Routledge and Sons, 1928), 44–45.

Within some industries, particularly those so vital to the war effort that government intervened in the ownership structure – coal and railways in particular – wage gains for workers reflected a mandatory redistribution of returns between providers of capital versus providers of labour. In the rail industry for example, where the state took control at the start of the war, wages and salaries took 47.8 per cent of the product of the industry while dividends took 52.2 per cent. After the war, workers were taking two and a half times what was being paid out to investors as dividends.[332] This may explain why the number of investors with rail-associated employment rose from two in the first sample to four in the second sample and to seven in the third sample. As wages rose, so, too, did the ability of labourers to save, an effort rewarded even more strongly by the deflation of much of the 1920's. Paul Johnson estimates that while the cash savings of the working classes rose by 47 per cent between 1921 and 1931, the purchasing power of those savings rose by 126 per cent.[333] It is also necessary to take account of the loosening of restrictions on alternatives to War Loan after the armistice. Also, new investment vehicles arose in the post-war period. Nevertheless, the third sample covers broadly the same number of investors as the first and second samples but shows a roughly 50 per cent increase in the capital raised. This points towards what might be described as a levelling down in the pyramid of income and wealth which was so narrow at the top before the war. All three samples of investors labelled 'Skilled Labour and Craftsmen' contain a mix of those who were clearly semi-skilled labourers, skilled workers and craftsmen who were likely to be sole traders or owners of businesses employing family members. The group includes bootmakers, bookbinders, butchers, builders and builders' foremen.

For the purposes of classification, those whose occupation was labelled 'clerk' are also included in this group. No other single occupation is as prevalent among skilled labourers and craftsmen by the third sample as are clerks. Although several have titles suggesting

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[332] Waites, *Class Society at War*, 97.

[333] Paul Johnson, *Saving and Spending: The Working-Class Economy in Britain 1870–1939*, (Oxford: Clarendon Press, 1985), 201.

higher levels of educational attainment, for the purposes of consistency, all are classified in this group. The participation of clerks as War Loan investors deserves special scrutiny because of what it tells us about rising demand for organizational skills in the post-war period as businesses consolidated into larger companies. Data from Routh show that between 1911 and 1931, clerical workers were the fastest growing group, with total numbers expanding by roughly 45 per cent, compared with a 14 per cent rise in those classed above manual workers, and an absolute drop in those employed as manual workers and foremen.[334] The 1911 Census failed to differentiate among different types of clerk which might have made the category overly broad.[335] Nevertheless, the rise in the number of clerks over the 1914–32 period is striking; there are four of 83 skilled trades and labourers employed as clerks in the first sample. In the second sample, there are 15 clerks among 91 investors in that category while in the third sample, there are 26 among 124 investors among skilled trades. As the number of clerks expands, so, too, does their capital invested in War Loan. In the first sample, holdings are £100 and £200 only. In the second sample, three of 15 clerks have War Loans totalling over £1,000. The largest of these belongs to a Derby-based clerk, William Morley and amounts to £9,326. In the third sample, four have holdings of £1,000 including a 'town clerk' from Southport who heads a group which has invested £4,429 in War Loan.

Among the remainder, the occupations are diverse. A study looking at small businesses in Merseyside, Liverpool suggests that, among the group, there were varying degrees of ability to both earn and save but it only looked at those in working-class households. Occupations included were those engaged in repairs and alterations, those engaged in cleaning and clearing and those who were wood-workers and furniture makers.[336] It is these types of occupation that characterize all three samples of the last occupation category of the full sample. The first sample includes four builders, two painters and one

[334] Routh, *Occupation and Pay in Great Britain*, 6.

[335] Routh, *Occupation and Pay in Great Britain*, 24.

[336] J.J. Parker, 'The Independent Worker and the Small Family Business: A Study of their importance on Merseyside', *Journal of the Royal Statistical Society*, 95.3 (1932): 531–5.

porter, while the second sample includes two 'carriers' and a furniture remover along with two electricians. By the third sample, the group includes five decorators, two carpenters, a 'general furnisher' and an electrician.

Nevertheless, these are workers employed in occupations where earnings potential is well below that of higher-earning professionals. In the first sample, 12 of 62 investors whose occupation can be characterised along the lines of the Merseyside study as 'fixing and repairing things'. These include three builders and a builder's foreman, three plumbers, and one each of a contractor, mason, painter and plumber. The single largest of these is Joseph William Fitter of Robin Hood Hall Green, Birmingham, who purchased £3,000 in War Loan on 15 January 1915. In the 1911 Census, Mr Fitter is, as he described in the ledgers, a machinist. He was aged 60 at the time of the Census, widowed and living with his married daughter, her husband and their two small children. The son-in-law's occupation is given as 'silversmith and traveller', suggesting that Mr Fitter's daughter has married into the family of skilled tradesman, a social class like her own.[337] However, Mr Fitter's initial investment may well reflect some inherited capital; in the 1881 Census, he was married, aged, 30, and already a machinist employing four workers. In addition to his wife and two children, he had one live-in servant.[338]

By the second sample, skilled labourers and tradesmen are 4.6 per cent of the male retail investors but have supplied just under 2.0 per cent of the capital. In this sample, the 'fixing and repairing' occupations fall to just five investors, two of whom are electricians and one each a moulder, builder and a joiner. Investments range from a £20 holding by William Edwin Cartwright, an electrician from Winscombe, Somerset to £500 by a group led by John Hodge Wearne, a builder from Hayle, Cornwall. But the varied 'carrying' occupations and woodworking become evident. The group includes three investors who describe themselves as 'carrier', a furniture remover, a carter, a cabinet maker, a 'waterman' and a 'wharfinger'. Several are in retail-facing occupations: there are four

[337] 1911 England Census, Warwickshire, Erdington, 22, 314.

[338] 1881 England Census for Joseph W. Fitter, Worcestershire, Kings Norton, District 31, 24.

butchers, four confectioners and a tailor. There are five investors engaged in the printing or engraving business, one of the best paid of the manual trades and one where, despite the working-class nature of the employment, there are five households out of 100 in this occupation that manage to have a live-in servant.[339]

By the third sample, the group includes three blacksmiths, of whom the single largest investor was George Littlejohn of Gamrie, Banffshire. He invested £1,202 in two separate purchases of War Loan in 1923 and 1926. There were a further 14 other investors whose occupation suggests they are involved in house or shop building and repair, five in the printing trades, three labourers, two gamekeepers and a single head waiter. However, the group of 124 investors in this category now includes 20 who holding War Loan positions valued at £1,000 or more. Among these, the single largest investor is George Owen, a tailor from Swansea, Wales who had been a War Loan investor before the time of the third sample and used an existing £2,000 holding later increasing that to £2,500. A Leeds-based builder was also a significant investor, apparently taking £2,000 of his own cash in September 1927 to purchase War Loan. The position was sold off by late October 1928. However, the third sample also includes an even greater number of investors – 28 – whose purchases totalled £100 or less. Of these, 11 are for £50 or less. Overall, skilled labourers and tradesmen are 6.4 per cent of all retail investors by the third sample although their capital contribution, at 3.5 per cent, is certainly more modest. Their median buy, at £300, is below the male average.

Investment by skilled labourers and tradesmen shows a steady rise over the sample period when measured as a percentage of male retail investors and by the percentage of capital contributed. In the first sample, they are 4.0 per cent of male retail investors and account for 2.2 per cent of capital raised. In the second sample, they are 4.6 per cent of retail investors but account for only 1.9 per cent of capital raised. But by the final sample, skilled labourers and tradesmen are 6.4 per cent of all retail investors although their capital contribution, at 3.5 per cent, is more modest. Their median buy, at £300, is below

[339] Perkin, *Rise of Professional Society*, 118–120.

the male average. When the occupation groups represented by educated professionals and skilled labour and craftsmen are added together, the number of investors account for over a fifth of male retail investors in total by the third sample, up from just under 10 per cent in the first sample. While the total capital contributed by this group is relatively modest – the two groups together provide roughly 15 per cent of War Loan investment from male, retail investors by the post-war period, up from around 3.5 per cent in the first sample – it is the rate of growth that is most startling. The analysis offers a granular look at how the narrowing of incomes and wealth became an unintended by-product of war.

Conclusion

The purpose of analysing the occupations of War Loan investors is to understand their own sources of capital. These are engaged in a wide variety of enterprises, but two themes are clear; first, the supply and demand for goods during wartime allowed certain investors to profit very significantly. This is reflected in some occupational categories, particularly those of distributive trades and manufacturing. Second, wartime conditions boosted incomes of some workers at the lower margins of the middle classes, enabling them to amass savings to invest in War Loan.

But it is by no means possible to conclude, based on ledger records alone, that the First World War was a leveller of social or economic class. Clearly, a range of individuals who would have once been on the margins of working-class incomes were able to save enough to enable themselves to earn a very small *rentier* income. But even among those who were working for a living by pursuing occupations and professions, the long arm of inherited wealth has boosted their fortunes. Many have entered businesses or professions which they only could have done with the inherited wealth, social capital and income of their own parents; these opened doors to high quality education, training and social connections needed for success. The inequality in the distribution of income and wealth in early twentieth century Britain is on full display throughout the entire period. What the analysis of investors’ occupations does allow us to see is how – albeit slowly and at the margins – war softened some of the glaring inequalities that prevailed in the period before. Labour scarcity in key industries during wartime forced government – however reluctantly – to tilt the balance of power in wage bargaining more towards workers than had ever been the case before. The need to collect and distribute goods and commodities used for war gave new opportunities for profits to salesmen, middlemen and brokers; heightened mobility of the population offered opportunities for profits in a range of industries that had previously catered to largely stationary communities. Looking at the distribution of occupations also allows us to see how war changed demand for skills. The percentage of male retail investors employed as either skilled labourers and craftsmen or as educated professionals rose from around 8.3 per cent of the total in the first sample to nearly a fifth of all men with a profession by the third sample. That offers anecdotal evidence of the way that a reduction in income inequality began to percolate through British society in the post-war period. Even the gradual reduction in the percentage of male investors describing themselves as 'Gentleman' or 'Esquire' over the three samples offers a clue to how the relationship between social status and occupation was beginning to shift.

Analysis of investor occupation offers one additional insight; that is, it points towards the mechanisms through which the First World War, for all its powerful destruction, spawned opportunities for wealth creation for certain private individuals and businesses. To the extent that War Loan investment is a function of rising personal wealth, analysis of investor ledgers shines the spotlight on that process. What the ledgers suggest is that those with the most capital at the outset of war had the greatest opportunities to benefit from it. But they also point towards gains among those with little wealth at the outbreak of war. The next chapter will try to look at the wealth-generating effects of war on regions of Britain which were home to the most significant groups of investors during the 1914–32 sample period. Parts of Britain were net gainers during wartime, while swathes of the country suffered very badly after. It will look at these variable effects by tracing the geographic shift in among investors in War Loan.

CHAPTER 5
The Stark Geographic Shift

This chapter will look at the shift in the geographic home of investors over the course of the 1914–1932 sample period. The reasons for isolating geography as an investor characteristic are like those for sorting investors by occupation; these point to the source of an investor's capital. Already, the review of occupations has pointed to those for whom war profits were likely to have increased capital available for investment. But looking only at occupations has limitations. It does not allow us to see how war might have changed the economics of regions where the 'multiplier' effects of vastly increased wartime spending might have taken effect.[340] The spill over effects of war spending are likely to have enriched more than those employed in, or operating businesses in, industries directly related to conflict. Expanded output at a munitions plant, for example, might translate into higher profits for nearby grocers and pub operators. A geographic analysis of War Loan ownership allows a closer look at these effects. Geographic shifts in the War Loan investor base also offers insight into how wealth generally shifted as a result of war. That is because in the decades before 1914, some of the industries whose resources were most required for the war effort were geographically concentrated in the north east, north west and Scotland. The geographic concentration of British industry before and after the war – particularly that of its 'old' industries which dominated exports – is striking. There are good reasons to believe that these 'core' industries were already in decline before the outbreak of war, as will be discussed later in this chapter. But demand

[340] Alan S Blinder, 'Keynesian economics', The concise encyclopaedia of economics 2. (2008), published in the on-line Library of Economics and Liberty. https://www.econlib.org/library/About.html (accessed 17 September 2019). Broadly, Alan Blinder is describing the concept at the core of Keynesian economics; that in a world of sluggish demand, government spending investment will encourage demand to pick up in response. That pick up will be some multiple of the investment spending that encouraged it in the first place. If government builds and operates a plant that produces tanks, businesses nearby will see a pickup in demand. http://www.utm.edu/staff/davidt/finance/ISLM/Keynes_NewClassical.pdf (Accessed 17 September 2019).

for their output in wartime masked these weaknesses. This decline becomes particularly relevant to this research as this chapter will show.

This chapter will be structured as follows; first, I will show the extent to which there was a dramatic shift in the geography of investment from London and the south east of England in the first sample to the north east, north west and Scotland by the third sample period. I will briefly set out explanations for the capital sources for each of these geographic regions. The second section of the chapter will look at the effects of various government policies during and after the war that were likely to have contributed to that shift. These will look at each of the samples to see how they are reflected in investment patterns. Among the policies likely to have affected investment are those intended to force investors who had exported their capital abroad to bring that back to Britain and redeploy capital in sterling (as described in Chapter 2). Another policy was that levelled by Treasury at the London Stock Exchange and at the Bank of England in the manner, and prices charged for, investment in government securities. Cutting transaction costs for investors based far outside London appeared to have encouraged that shift. The second section will also look at the effects of easing government restrictions on post-armistice investment as well as efforts to counter public ire regarding profiteering. This second point matters for two reasons; first, it was an attempt to halt the build-up of huge profits within certain industries which would eventually be recycled into War Loan. But it is also important because sharp rises in commodities prices – particularly for food – led to demand for much higher wages. This, combined with labour shortages stemming from demand for manpower on the war front - caused government to intervene in labour disputes in war-related industries. This, in turn, gave negotiating power to unions that these had not had this before. The intervention had the effect of tilting the distribution of profit away from capital and towards labour in these industries, placing capital in the hands lower middle and working classes who would not previously have had access to it. Because of the geographic concentration of these industries, this becomes apparent only by an analysis of the geography of investment. The third section of this chapter will make the case that much of the shift out of London and into the north and Scotland represents ‘capital recycling’. Capital from older, export-driven industries that were highly profitable during wartime was withdrawn as returns from those industries faltered. The proceeds were invested in safe War Loan, securities whose returns improved in real terms every year in a deflationary environment.

Geographic distribution of War Loan and how it changed

Table 5.1 Geographic Distribution of War Loan Holdings, All three Samples*

Region	3½% War Loan 1925-28		5% War Loan 1929-47		Converted to 3½%	
	% of Investors	% of Capital	% of Investors	% of Capital	% of Investors	% of Capital
East	6.0	2.6	5.6	4.1	3.6	1.5
East Midlands	3.4	2.0	4.8	4.5	5.1	3.0
Ireland	2.1	2.9	1.9	1.1	1.4	1.4
London	29.7	50.4	23.0	43.4	9.2	8.1
North East	9.0	5.6	11.0	5.1	13.1	25.2
North West	10.7	10.0	13.0	10.6	16.7	21.6
Scotland	7.3	7.5	7.3	3.8	20.9	18.1
South East	16.0	6.8	15.1	14.3	8.2	4.9
South West	7.0	2.9	8.8	5.2	7.3	3.7
Wales	1.6	1.6	2.8	1.7	6.5	3.8
West Midlands	6.7	7.5	5.8	5.7	6.0	7.7

* May not sum due to rounding

As the above table makes clear, the largest sources of capital during the early years of war are in London and the south east of England. London alone supplied just under 30 per cent of investors by number and just over 50 per cent of the capital among investors. By the third sample, London supplied under 10 per cent of both individual investors and capital. But by the post-war years, investors in the north east, north west and Scotland were contributing over half of all individual investors and nearly two thirds of capital. The following table makes clear just how significant these two separate regions – London versus the north – were in terms of both the number of investors and the capital they supplied. The two regions together accounted for roughly 80 per cent of the capital raised for the first sample and 78 per cent of that raised for the third.

Table 5.2 Geographic Distirbutuion of War Loan, All three Samples

Region	3½% War Loan 1925-28		5% War Loan 1929-47		Converted to 3½%	
	% of Investors	% of Capital	% of Investors	% of Capital	% of Investors	% of Capital
London	29.7	50.4	23.0	43.4	9.2	8.1
South East	16.0	6.8	15.1	14.3	8.2	4.9
London & south east	**45.7**	**57.2**	**38.1**	**57.7**	**17.4**	**13.0**
North East	9.0	5.6	11.0	5.1	13.1	25.2
North West	10.7	10.0	13.0	10.6	16.7	21.6
Scotland	7.3	7.5	7.3	3.8	20.9	18.1
Scotland & north east/west	**27.0**	**23.1**	**31.3**	**19.5**	**50.7**	**64.9**

The Role of London

The reasons why London and the South East were sources of capital are mostly historic. The region's genesis as a capital distribution hub lies in the seventeenth century with the rise of Britain as a trading nation. Neal and Quinn argue that the need to take advantage of favourable national exchange rates required the development of international networks of merchants and bankers, leading to the creation of that staple tool of international commerce, bills of exchange. It was these deep networks of agents that allowed this market to work.[341] But Dickson argues that it was the creation of a market for the sale of government securities, and eventual creation of the London Stock Exchange, that was key to the region's role as a centre for capital.[342] One reason why London may have been such a prominent source of capital in the first sample may have to do with the significant contribution of institutions. Overall, institutions, measured by number, were a modest percentage of total investors in the 3½% War Loan 1925–28. But they represented the source of a disproportionate percentage of capital. The presence of institutions in London also explains the outsized role it played in gathering capital for war. The sampling exercise found that institutions such as finance and insurance houses were particularly large investors in the first ever War Loan. Of the roughly 40 per cent of all capital raised by institutions for that War Loan, nearly three-quarters came from those with London

[341] Larry Neal and Stephen Quinn, 'Networks of information, markets and institutions in the rise of London as a financial centre, 1660–1720' *Financial History Review*, 8.1 (2001): 7–8.

[342] Dickson, *The Financial Revolution in England, 515-516.*

addresses.[343] In total, 67 'institutions' are among the 2,165 investors in the sample and of these, 48 are based in London. Of the £969,433 in institutional capital in the sample that was raised for the 3½% War Loan – roughly 40 per cent of the total – £727,067 came from London.

Within the sample, the most significant of these was Sun Life Insurance Company which purchased £250,000 of stock between November 1914 and March 1915. The purchase was made in the name of two underwriters, Edward Dent and Robert Pryor Marlborough, with Lord William Henry Goschen, a director of the company[344] and a scion of the Goschen banking family, several of whose members were awarded baronetcies. Lord Goschen was also a British politician. Another London financial institution investing in War Loan was Lloyds of London, which placed £48,000 in three purchases between February and April 1915. Not all London institutions were finance-based; E.J. Bradstreet & Sons on Chiswell Street, cardboard carton makers, made a modest £106 investment in War Loan, while several London-based charities, including the Peabody Donation Fund were also investors. Peabody invested £10,000 in October 1915 and converted it to the more attractive 4½% War Loan 1928–45.

Besides the presence of financial institutions, there are other historical explanations for why London might have been the source of such a high percentage of capital at the outset of war. There is some evidence that wealth concentration was higher in London than elsewhere in Britain. Rubinstein looked at the geographic distribution of value of the largest estates in 1906 – less than a decade before the outbreak of war – and found that nine of the 11 estates of £1 million or more were based in London as were half of the 18 estates valued at £500,000 to £1 million.[345] Moreover, the late nineteenth century saw a decline in holdings of land as a store of wealth in favour of tradeable securities. In late-

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[343] See Appendix 1: 'Methodology' for a description of the sampling method.

[344] T.J. Spinner, *George Joachim Goschen: the transformation of a Victorian Liberal*, CUP Archive 1973

[345] W.D. Rubenstein, *The Wealth Structure of Britain in 1809–39, 1860–1, and 1906*, in *Men, Women and Money*, eds D.R. Green, A. Owens, J. Maltby, J. Rutterford, (Oxford: Oxford University Press, 2011), 48.

Victorian Britain, contemporary estimates still assigned more than 40 per cent of national wealth to land and buildings in 1885. This fell to a third in 1912.[346] The shift increased the role of finance and financial intermediaries who were largely concentrated in London. There is other research to support the sample finding of heavy concentrations of buyers in the London region.[347] D.R. Green, et al., in an analysis of differences in the way investors stored wealth around England and Wales 1870–1902, found this to be the case. For example, while government securities made up nearly 50 per cent of the holdings of wealthy Londoners, they were less than 5.0 per cent of holdings of those in the north, north east and Yorkshire. Investor appetite in the south of England held over 20 per cent of wealth in government stocks, while in the south west, this accounted for a more modest, roughly 12 per cent of wealth. But wealth among individual London-based investors is also visible in the first War Loan sample. Among the wealthiest, a London bias is evident. Of the 150 male investors who made minimum war loan purchases of £1,000 each, 50 were based in London or Middlesex. London held only around 12.5 per cent of the total population in the 1911 Census and in aggregate, London and the south east held just under quarter of British population in 1911. [348]

Outside London, institutional investment in the first sample mostly came from industrial, rather than financial sources. Among the largest investors in the 3½% War Loan are Bass, Ratcliffe & Gretton, brewers based in Burton-on-Trent, Staffordshire. The firm made a £100,000 investment on 8 February 1915 and converted it into the higher yielding 4½%War Loan of 1925–45 in August. Another was an industrialist and one-time Liberal MP, Lord James Ashton. Lord Ashton invested £100,000 in War Loan in March 1915 and converted it to a higher yielding 4½% War Loan in October. According to a biography, he was also known as The Linoleum King, having inherited and expanded his

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[346] Offer, *Property and Politics*, 5.

[347] David R. Green, Alastair Owens, C. Swan, C., van Lieshout, ‘Assets of the Dead: Wealth, Investment and Modernity in Nineteenth- and Early Twentieth-Century England and Wales’, in *Men, Women and Money: Perspectives on Men, Women and Money,* ed by R Green, A Owens, J Maltby, J, Rutterford, (Oxford: Oxford University Press, 2011), Table 3.6, 9.

[348] Census Report, 1911, England and Wales.

father's coated fabrics business.[349] Other investors included J.P. Haynes Ltd of Birmingham, a company which advertised itself as 'Iron and Steel Merchants' specializing in 'Steel sheets, black and galvanized in all finishes' as well as in steel bars.[350] Metals companies were among the biggest beneficiaries of wartime demand. Several other significant large investors emerged from the sample of 3½ % War Loan 1925–28 that would underscore how Britain needed to adopt an increasingly interventionist stance in economic, financial and industrial affairs as the war carried on. One example is a group of three investors from Cardiff, Wales, all of whom described themselves as 'Gentleman' and all listed their home address as Spillers and Bakers Ltd. The group purchased £4,500 at the end of April 1915, but Spillers and Bakers would later become notorious as an example of a milling company whose profits had soared during the war as shortages allowed producers and retailers to mark up prices. Indeed, on 3 May 1915, days after the group made the investment, *The Times* reported that the company was able to pay shareholders additional dividends equal to 17½ per cent on top of ordinary dividends and still have retained earnings equal to 54 per cent of the value of its outstanding share capital.[351] It was only one of several corporate announcements that economist and statistician Josiah Stamp described as having 'aroused the public to the fact that there was a 'war profits' problem.'[352] Also in the sample are two shipping companies – Glasgow-based Clyde Shipping Co Ltd and Cork, Ireland-based Cork Steamship Co Ltd – which were engaged in the industry singled out as among those most profiting from war. Clyde Shipping made three purchases of War Loan in July 1915 – when the shares were trading at 93 3/16% – totalling £100,000 and converted these to the new 4½ % War Loan 1925–45 in October 1915. Cork Steamship made two separate purchases of War Loan – £10,000 in December 1914 and a further £15,000 in July 1915 – before converting them to the new 4½% War Loan 1925–45 in September 1915. Another

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[349] Lancaster County Council: Promoting City, Coast and Countryside, Accessed 17 September 2019 https://www.lancaster.gov.uk/the-council-and-democracy/civic-and-ceremonial/lord-ashton-the-lino-king.

[350] Grace's Guide to British Industrial History https://www.gracesguide.co.uk/J.P. Haynes (accessed 17 September 2019)

[351] Marwick, *The Deluge*, 163.

[352] Stamp, '*Taxation During the War'*, 146.

large investor was H&C Grayson of Liverpool, makers of petrol and paraffin engines for ships which purchased £20,000 in January 1915. An associated company with which it shared an address, Liver Securities, invested £2,000 on the same day. These, too, were converted to the more attractive 4½% bonds in October 1915. Other records outside the sample also point to the shipping industry as an early capital provider for War Loan.[353]A list of investors whose purchases totalled more than £100,000 and filed with the Bank of England, includes that of C.A. Parsons & Co Ltd, a company founded by Charles A. Parsons to exploit a new turbine engine for use in ships (£227,177) , the Parsons Marine Steam Turbine Co, created to build the turbine engines (£104,643), a personal investment by The Honourable Sir Charles Algernon Parsons (£103,761) , and one from The Donaldson Line Ltd, a steamer company which regularly sailed routes between British ports and North and South America.[354] Shipping companies would later loom large among those accused of extracting excess profits from war. But there is another element to consider in respect of shipping companies; their geographic concentration, particularly in Scotland. It is precisely that geographic concentration of industry throughout Britain that explains much of the shift in the core War Loan investor base from London to the north and Scotland over the sample period.

The geographic distribution of investors matters because typically, these lived close to where they worked or operated businesses. Therefore, the geographic tilt in the ledgers is closely linked to the location of some of the most profitable industries during wartime and to their subsequent decline in the years after. In the decades before 1914, some of the industries whose resources were most required for the war effort were geographically concentrated in the north east, north west and Scotland. The geographic concentration of

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[353] BoE A, AC30/357 5% National War Bonds 1922, 1924, 1927, 4% do., do., do, 1927, memo, n.d., Headed 3 ½% War Stock 1925–28, Holding of £100,00 or over', signed G.O. Mead.. Margin notes Donaldson Line 'transfer to bonds' at 22 September 1927, holdings of Rt.Hon. Marmaduke, Viscount Furnesss, transfer into bonds lodged on 27 September 1927.

[354] *Grace's Gui*de *to British Industrial History* https://www.gracesguide.co.uk/Donaldson_Line (accessed 17 September 2019).

British industry before and after the war – particularly that of its 'old' industries which dominated exports – is striking.

One of the starting points for this chapter is precisely that industrial concentration. In explaining why industry was as highly concentrated as it was through the interwar period, Nicholas Crafts and Abay Mulatu conclude that so-called factor endowment arguments explain the location of British industry in the period 1871–1931. These industries needed access to an educated population and white-collar workers, as well as to the availability of coal in abundance and steam power. Indeed, they note, at the end of the period and despite transport costs which had been falling all during that time and which should have made it easier for newer industries to site factories nearer to their wealthy customer base in London and the south, these factor endowments kept industry concentrated in traditional regions.[355] The northern and western industrial areas were heavily engaged in nineteenth-century export industries including coal, iron and steel, shipbuilding and cotton textiles.[356] These were the industries experiencing the greatest surge in demand for their output during the war and offering the greatest opportunities for profit. Opportunities for outsized profit came from a variety of sources: military demand for goods, labour shortages, import restrictions and an increasing – but often ineffective – effort by government to control and direct the nation's industrial resources. These industries also saw growing demand from civilians whose own wages were rising. As labour shortages forced government to intervene in wage disputes, workers achieved bargaining power that they had not had previously. Workers flocked to buy consumer goods that they had been unable to afford in pre-war times. They were precisely those to whom government urgings to limit consumption had been addressed (see Chapter 2).

[355] Nick Crafts and Abay Mulatu, 'What Explains the Location of Industry in Britain, 1871–1931?' *Journal of Economic Geography*, 5.4 (2005): 499–518.

[356] C.E. Heims, 'Industrial Organisation and Regional Development in Interwar Britain', *Journal of Economic History*, 43.4 (1983): 931–52.

How government policy encouraged the geographic shift

A variety of government policies likely encouraged the geographic shift; moves to bring sterling back to Britain along with efforts to control transaction costs of War Loan investment and a general effort to limit costs and prices all played a role.

In the second War Loan sample, investors based in London and the south east collectively contributed roughly as high a percentage of capital, roughly 58 per cent, as had been raised from investors in those regions in the first sample. However, some geographic shifts begin to emerge. One of these might reflect efforts, described in Chapter 2, to persuade, and eventually force, holders of non-sterling denominated securities to sell their stock and accept War Loan in the form of Exchequer Bonds in return. Investors seeking new securities to buy would have found fewer on offer. Also, they were being offered inducements to sell those they already owned. A factor that might have affected holdings of government stock in the later war years and after was simply a reflection of the way this group invested in pre-war days. For example, Scottish investors had been significant holders of US and Canadian securities ordered to be surrendered by Treasury in 1917 as Britain struggled to maintain its exchange rate against the dollar.[357] In the pre-war years, investors living near the so-called provincial stock exchanges picked their investments locally. In the post-war years, disruptions in key industries such as cotton spinning, and railways may have caused those who had been earlier investors to regret those choices. For example, the Railways Act of 1921 consolidated a group of Scottish rail lines whose securities were among the most popular on the five Scottish exchanges that existed after the war. Some may have used the proceeds of their sales of US securities, as well as proceeds of sales of railway and cotton spinning stocks, to purchase War Loan. Also, Britain's provincial exchanges listed securities of local businesses seeking to attract new capital from local investors; a high level of local subscribers to a new stock issue from a railway or canal-operator – among the first users of provincial exchanges – was a pre-requisite for receiving a charter from

[357] W.A. Thomas, *Provincial Stock Exchanges*, (London: Routledge, 1973) 318.

Parliament.[358] Similarly, the Liverpool Stock Exchange specialised in listing the shares of both shipping companies and their insurers.[359] Investors around Britain who had owned shares that were traded on provincial exchanges may well have sold those investments after the war in favour of safer holdings with tax advantages. That would have been War Loan. Indeed, even before the launch of the 5% War Loan 1929–47, there were signs that these moves were influencing demand. In June 1916, *The Globe* newspaper was reporting the effects of these capital controls on market prices. 'It has been the portion of the money that has been paid out, on dollar securities by the Treasury and invested through the Stock Exchange that has brought about the revival in high-class investments,' *The Globe* newspaper declared. Not only did the liquidity boost prices of Consols, it also increased those for domestic railway stocks, industrials and shipping issues.[360] By the time of the second sample, those selling securities to Treasury were paid out in Exchequer bonds. Those were convertible into the new War Loan as were investments in both previously unsaleable Consols and the recent 4½% War Loan 1925–45. Of the entire second sample of investors in 5% War Loan 1929–47, just over 30 per cent of investors by number made their first investment before 1917 mostly via conversion of older issues.

There was another factor that is likely to have influenced a geographic shift. Since the launch of the first War Loan, there had been increasing pressure on both the Bank of England and the London Stock Exchange to make purchases of government securities possible via Deed transfer. Deed transfers cut transaction costs for investors living far from London. An internal account of the transformation of trading in government stock to Deed from Book, used as a training manual for staff, recounts the initial resistance of both the Bank and stockbrokers to Deed transfer. London stockbrokers would no longer be able to claim a portion of the commission on the transaction from their provincial

[358] J.B. Baskin, 'The development of corporate financial markets in Britain and the United States, 1600–1914 overcoming asymmetric information', *Business History Review* 62.2 (1988), 199–237.

[359] W.A. Thomas, *Provincial Stock Exchanges*, 120.

[360] 'In the City, "The Revival in Investment Securities", *The Globe*, 12 June 1916.

correspondent broker.[361] Following the Finance Act of 1911, Deed Transfer became legally possible, but went largely unused. But even then, brokers charged a fee of *2s:6d* for transfers from Book to Deed entry form, angering investors. Fees and charges became a source of tension between the Bank and Treasury as the need to raise capital for war intensified. A Treasury Minute dated 7 January 1915 made provision for stocks issued under the War Loan Act of 1914 to be transferable by Deed.[362] By June 1915, the Glasgow Stock Exchange was pressing Treasury for an end to the fee, describing it as 'expensive and inconvenient to Provincial investors'.[363] An internal history of the Bank noted that real pressure for Deed transfer began to build with the launch of the 4½ % War Loan 1925–45, into which investors could convert their Consols, then trading at prices only a fraction of face value. Demand for Deed Transfer was 'enormous' the history notes. 'The demand showed a further increase with the issue of the 5% War Loan. As at 31st August 1921, at least 1,340,000 holdings were registered as transferable by deed, up from just 1,000 in 1914.'[364] The fee required for the transfer of ownership to Deed from Book was ordered to a halt from 26 January 1917, coinciding with the launch of the 5% War Loan of 1929–47.[365] Thus, the reduction in speed and costs of transactions for investors living far from London likely explains some of the geographic shift. The 5% War Loan 1929–47 had over 1,066,000 individual initial subscriptions, roughly 10.9 times more investors applied to buy it than had done for the 3½% War Loan 1925–28.

But there was another factor that is likely to have influenced the geographic shift among War Loan investors. That is government's own efforts to take control of industry and to

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361 BoEA, AC4/1, G. Blunden, '*A Short History of the Development of the System of Transfer of British Government Stocks by Instrument in Writing'*, December 1952, 3.

362 BoEA, AC4/1, G. Blunden, Ibid, 5

363 BoEA AC19/772, letter from Horace O. Gifford, Secretary, Glasgow Stock Exchange to McKenna, 27 July 1915.

364 BoEA ADM2/1, J.A.C. Osborne, nd, The Bank of England 1914–1921, Vol. 1., 471. https://www.bankofengland.co.uk/-/media/boe/files/archive/ww/boe-1914-1921-vol1-chapter3.pdf accessed 1 June 2019.

365 BoEA, AC4/1, G. Blunden, '*A Short History'*, 14.

limit profits that were not only economically and fiscally destabilizing but were politically so as well. Ministers had been progressively forced into action by a series of crises which began as early as 1915. The first involved the production of shells, a problem made even more significant by growing evidence of a manpower shortage as enthusiastic volunteers signed up for military service. This eventually led government ministers to conclude that further interference by the state in business would be required. Very quickly after, another crisis presented itself that underscored the geographic distribution of wartime industry; it was forced to requisition the output of jute in March 1915 as an acute shortage of sandbags required for trench warfare hit troops.[366] Jute is just one example of geographic concentration in war-related production; 90 per cent of it was located in Dundee, Scotland, long a whaling centre. Whale oil had been used to soften jute fibres before weaving could take place.[367] The path from rising government demand to supply shortages to profits is illustrated by a report of the annual meeting of Messrs A. and S. Henry and Co, merchants and manufacturers of Portland Street, Manchester – identified as a firm of cotton and jute merchants with interests in Dundee, Scotland. 'The company's profits have amounted this year to about £400,000 as against about £250,000 last year and just over £100,000 in the preceding year' the *Manchester Guardian* wrote in its account of the meeting. 'Its general reserve will now be £450,000 as against an ordinary share capital of £600,000. A considerable number of Government war contracts have been dealt with by the firm during the past year'.[368]

The demands of war facing Britain's economy and the increasingly strenuous efforts to channel scarce resources for war were creating opportunities for outsized profits within certain industries. The first to benefit were those who already had capital available. There is little question that war opened the door for excess profits and 'profiteering' remained a potent political refrain during and after war. Ernest V. Morgan describes government

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[366] Morgan, *Studies in British Financial Policy* 33–38.

[367] B.J. Eichengreen, *Hall of mirrors:Tthe Great Depression and the uses and misuses of history* (Oxford: Oxford University Press, 2015), 111.

[368] *Manchester Evening News*, Saturday, 30 November, 1916

efforts to control the economy in the early war years as ‘indifferent’ and ‘half-hearted’ and suggests that the point at which government became serious about seizing control of the nation’s economy was only after the collapse of the government of Herbert Asquith on 6 December 1916. One example of this half-hearted effort was an attempt early in 1915 by the Board of Trade to attack the ‘panic’ rise in food prices. After consultation with grocers, it came up with a list of recommended maximum prices. But these were never made compulsory and the scheme was quickly dropped.[369]

By September 1915, it became clear that Britain’s existing tax base could not support the cost of war. Chancellor Reginald McKenna announced in the autumn budget that income and other taxes would be raised sharply. In September 1915, the rate of income tax was raised by 40 per cent and the exemption limit was cut from £160 per year to £130 per year, drawing a group of working-class men into the tax net who had previously been exempt. In addition to general income taxes, those on farmers were also raised and a higher rate of super-tax was levied on annual incomes above £8,000. But perhaps the most significant tax increase was that of Excess Profits Duty (EPD), a tax devised not simply to raise revenue but also in response to public ire about profiteering, a potentially destabilizing political issue.[370] EPD was unveiled with McKenna’s August 1915 budget. Josiah Stamp, who was the architect of the scheme, made clear that the ability to extract excess profits in business was hardly limited to those selling goods directly to government. EPD was to be calculated as a levy on the increase in company profits that was higher than that earned in a base year of either 1911–13 or that prevailing in August 1914. Significantly, partnerships such as those of law firms were exempted.[371]

Businesses responded to EPD in part by hoarding capital. This may go some way towards explaining the relative absence of institutions as investors in the second sample of War Loan. It encouraged the use of reserves that had been generated as profits to be saved in

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[369] Morgan, *Studies in British Financial Policy*, 36.

[370] Morgan, *Studies in British Financial Policy*, 91–92.

[371] Stamp, *Taxation During the War*, 62.

corporate balance sheets for use in improving or repairing plant and equipment so as not to incur tax. In the case of coal, a Coal Controller was created.[372] Bernard Waites notes that in this, the coal industry was hardly unique; these effects also showed up in the way companies apportioned dividends out of profits. EPD did not begin to bite until mid-1917 and in 1917–18 the effects of the tax showed up as a sharp drop in company profits generally. Businesses, Waites concluded, adopted the approach of putting a larger percentage of their profits to reserves to cover the capital cost of repairing wear and tear and to finance expansion.[373] Indeed, Waites cites a table produced by *The Economist* in 1919, which shows that despite paying out dividend rates slightly in excess of owners' total return on capital in 1913–14 through 1915–16, those dividends began to lag behind from 1916–17 onwards.[374]

Surging demand for goods and commodities during wartime was not an opportunity for unbridled profit making. If prices and taxes were rising, so too were wages. Morgan describes the difficulty in accurately calculating inflation during the war years. But drawing on indices compiled by *The Economist*, cereals and meat prices rose from 102 at the end of July 1914 to 139 by January 1915, to 167 by January 1916 and to 232 by January 1917. Other food prices rose to a more modest 160 on the index measure from 101 in July 1914. Cereals and meat, therefore, cost roughly 2½ times what they had at the time of the outbreak of war.[375] Morgan cites Bowley's calculations of wages increases, pointing out that these rose from a base level of 100 in July 1914 to a range of 135–140 in 1917. 'It is notable that through the whole period from 1914 to 1917, wages lagged well behind wholesale prices,' Morgan concludes.[376] The enthusiasm of young men for military service led to labour shortages. Data compiled after the first year of war showed that nearly a quarter of all the workers in the chemicals and explosives industry had

[372] R.A.S. Redmayne, *The British Coal Mining Industry During the War*, (London: Humphrey Milford, 1923), 92.

[373] Waites, *Class Society at War*, 101.

[374] Waites, *Class Society at War*, 100.

[375] Morgan, *Studies in British Financial Policy*, 272–273.

[376] Morgan, *Studies in British Financial Policy*, 293.

joined up, while over a fifth had gone from coal mining.[377] Government realised that if it wanted to focus the nation's labour force on the war effort, it would have to take the unprecedented step of cajoling and bargaining with labour union officials, giving these, as Marwick notes 'a status they had never had before'.[378] Employers' associations, which had been cohesive in standing against wage rises before the war, faced challenges in labour disputes, according to Arthur J. McIvor. Competition between employers for scarce labour, scarce commodities and government war supplies contracts fractured internal discipline and made collective action more difficult.[379] By January 1915, uninhibited recruitment to the armed forces led to a skilled labour shortage among engineering firms producing munitions for war in Lancashire, for example. That prompted some employers to break ranks on what were effectively deals to limit competition for scarce labour. These were deals where employer groups agreed that none of their members would pay higher wages than the others. Instead, the need for labour prompted them to offer additional work bonuses. The Rochdale master engineers, for example, sought permission from the Engineering Employers Federation to for permission to act independently and enact a scheme for 'a distribution of profits from time to time' from a member firm in the business of making rifles and shells.[380] This pattern was repeated across the north western regions of Britain during the war, and while government intervention in wage disputes moderated some effects, the need to pay higher wages would weigh on profits. However, it also meant that workers in certain industries saw rises in real wages, allowing some to put capital aside for saving that would later be invested in War Loan.

[377] Marwick, *The Deluge:* 96.

[378] Marwick, *The Deluge*, 96

[379] A.J. McIvor, *Organised Capital: Employers' associations and industrial relations in northern England 1880–1939*, (Cambridge: Cambridge University Press,1996), 146.

[380] McIvor, *Organised Capital*, 151.

By December 1916, there was a widespread acknowledgement of the need to counteract profiteering.[381] Sir Richard Hopkins, Chairman of the Board of Inland Revenue, spelled out for ministers just how excessive the increase in profits had been and singled out specific industries, particularly those of shipping and shipbuilding.[382] Indeed, both Bradbury and economist Josiah Stamp, singled it out. Stamp described the shipping industry as 'the most notorious and striking of any section of industry and the capital gains of those who sold ships outright were the subject of widespread wonder and disapproval' Under rules of free competition, freight reflected supply and demand. But even under the onslaught of German submarine warfare, shipping companies prospered due to insurance. 'Even where ships were lost by submarine action, the enormous recovery from the underwriters made it almost a short cut to riches to get one's vessels torpedoed,' Stamp reported.[383] Even before the war, shipping had been a significant industry for Britain. Up until 1914, Britain's share of the global shipbuilding market accounted for about 60 per cent of total output, and of that, much came from yards in the Clyde Valley in Scotland.[384] Coal was another highly profitable industry. Even before December 1916, government had to intervene in the coal industry and take control of profits.[385] To understand the ebb and flow of capital into coal, it is necessary to understand coal's centrality to the outcome of war. 'Of all the industries that contributed to the central issue of the war, perhaps the most important was the coal mining industry,' according to an account of that industry the Carnegie Endowment for International Peace

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[381] TNA, T170/105, Note and Memo from J.Bradbury to Maurice Hankey, 12 December 1916. Bradbury opposes lifting EPD to 80 to 100 per cent of additional profits but argues that much more should have been done earlier.

[382] TNA, T170/105, Memo, J. Bradbury 'Profiteering', 12 December 1916. Memo, Sir Richard Hopkins to Treasury, Appendices A&B, 12 December 1916. Hopkins notes that profits for 1916, profits are likely to be 20 to 25 per cent higher than in 1912 and 1913. He singles out woollen and worsted trades, engineering and metal industries, chemicals and leather, rubber and oil as having had the biggest increases in profits. Producers of boots and clothing saw a 100 per cent increase in profits, wool and worsteds of 60 per cent.

[383] Stamp *Taxation During the War,* 192–3.

[384] E.H. Lorenz, 'An Evolutionary Explanation for Competitive Decline: The British Shipbuilding Industry, 1890–1970', *The Journal of Economic History* 51.4 (1991), 911–35.

[385] Morgan, *Studies in British Financial Policy*, 47.

prepared shortly after the war. It is quite clear that without an adequate supply of coal for the manufacture of munitions it would have been impossible to have brought the war to a successful conclusion.[386] One other industry, also one which was geographically concentrated, was a beneficiary of wartime demand. Textiles, too, saw surging demand and rising profits. Cotton was largely domiciled in and around Lancashire while wool was centred in Yorkshire. Among the largest corporate investors in the second sample was Berry Brothers, woollen and worsted merchants based in Huddersfield, West Yorkshire, which purchased £4,600 of 5% War Loan. Another large investor in the second sample, Frank Oughtbridge Garside, also of Huddersfield, invested £1,000 in 5% War Loan in March 1917, listing his occupation as 'manufacturer'. In the 1911 Census, Mr Garside was aged 54, living at the address shown in the ledgers and running a woollen yarn spinning business and acting as a merchant as well.[387] Unlike other industries, and despite the intense demand for cotton and wool for the manufacture of soldiers' clothing, little was done to force the industry to re-direct its efforts to military production. Cotton yarn and cloth were an important part of Britain's trade in the pre-war years; cotton yarn and cloth were roughly 24 per cent of UK exports in 1910.[388] John Singleton notes that the cotton industry had very few restrictions on its activities during the war, allowing it to take advantage of a customer base with more to spend on its goods as wages rose. 'Government failed to make the best use of the resources available to it in Lancashire and permitted the cotton industry to hoard labour and to squander coal and shipping capacity, to the detriment of the overall efficiency of the war economy'.[389] Because of the geographic concentration of shipbuilding in the north east of England and in Scotland, that of textiles in the north west and that of coal in Wales, the north east of England and Scotland, understanding the flow of profits into these industries is crucial in explaining the geographic shift among investors' centres of gravity over the entire sample

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[386] Redmayne, *British Coal-Mining Industry During the War*, 257.

[387] 1911 England Census, Yorkshire-West Riding, South Crosland, 01, 146.

[388] William Gibson and William Lazonick, 'The British Cotton Industry and International Competitive Advantage: The State of the Debate'", in *Business History*, 32.4 (1990): 16.

[389] John Singleton, 'The Cotton Industry and the British War Effort, 1914–1918', *The Economic History Review*, 47.3, (1994), 601– 618

period. Geographically concentrated industries were not the only ones able to extract excess profits, according to the architect of the Excess Profits legislation; so, too, were more dispersed industries. Chief among these were grain and food; leather boots and clothing, chemicals and soap; and brewing, distilling and sugar.[390]

Although London and the south east provide roughly the same percentage of capital that went in War Loan in the second sample, a look at densities of War Loan holding per head of population shows that a shift is already beginning by 1917. When holdings by region are compared with the 1921 Censuses of England and Wales and that of Scotland, – Ireland did not have a Census in 1921 – certain areas stand out. London is the region where War Loan is most densely held in both the first and second samples, with one holding per 157 people and one per 18 people in each of those two respectively. The rise in density reflects the fact that there were more than 10 times the number of subscribers for the 5% War Loan 1929–47 than there had been for the lacklustre loan launched in 1914. But there are signs that holdings of War Loan are spreading geographically even at the time of the second sample. The north west of England, home to the cotton and spinning industries had one holding of War Loan per 19 people by the time of the second sample, nearly as dense as that of London. The north east of England, home to large collieries, iron and steel plants and the shipbuilding industry, had densities of one War Loan per 29 heads of population, about equal to that of the south east, long a traditional region for investors in government stock. War Loan densities in Scotland remained among the lowest nationally until the third sample for the years 1919–32; then it was home to one War Loan per 22 heads of population, making it the region where these securities were most densely held in Britain. London, in contrast, had War Loan densities of only one per 45 head of population in the third sample, while the south east of England held only one War Loan per 77 head of population.

[390] Stamp, *Taxation during the War*, 148.

Table 5.3 Ownership of War Loan per Head of Population by Region

	3½% War Loan 1925-28	5% War Loan 1929-47	Converted 3½%
London	157	18	45
North West	259	19	36
South East	291	29	77
South West	297	21	38
West Midlands	305	64	59
North East	384	29	48
East	409	27	46
East Midlands	534	37	53
Scotland	669	63	22
Wales	1183	68	37
Ireland	1473	208	174
All Britain	463	44	46

The lifting of post-war investment controls and capital re-cycling

In explaining the sharp shifts in the geographic base of War Loan investors between the first and third samples, it is necessary to consider two factors. The first of these is the lifting of controls on investment in wartime that meant that investors in the post-war years suddenly had far more choices open to them. The second is the fate of the core industries that generated so much wealth during wartime but whose fortunes changed after. In this section, I will highlight how both factors are likely to explain the shift in the geographic base of investors. I will also make the case that a significant minority of capital was pulled from industries that were highly profitable during the First World War but which struggled to match even the rates of return earned on government securities. Some part of the geographic shift away from London and the south east of England may reflect the gradual lifting of wartime restrictions on both the raising, and investment, of capital. After the armistice, Britain began to unravel some of the restrictions which had taken away alternative choices for investors and which were designed to channel them into War Loans.

As set out above, limits on overseas investment during the war made room for the British government to tap the capital of its own domestic investors. Before the war, London had chiefly been the centre of international capital raisings; in 1913, funds raised for domestic issues totalled £44.6m against £197.5 for non-domestic issuers.[391] These rules remained in place through 1918, but relaxation began the following year. In April, the rule preventing British residents from purchasing securities abroad was abandoned, but ministers kept the requirement that foreign entities seek permission from Treasury to list new issues until November 1919. In March 1919, the Treasury's Capital Issue Committee began to allow some issues by borrowers based in the dominions or in its colonies. It cited the reason for maintaining some controls as 'the main need now is to protect the foreign exchanges and to conserve capital for the development within the United Kingdom.[392] Keeping capital at home for reconstruction was one of the objectives of not unravelling the restrictions completely. But John Atkin goes on to argue that preserving the sterling exchange rate was also an objective and that between these twin objectives, it was exchange rates that predominated. The sterling rate against the US dollar fell to $3.77 in December 1919 from its level during the war of $4.76, and Britain had yet to negotiate the terms under which it would repay the US for monies borrowed during the war.[393]

The Treasury was so concerned about competition from foreign issues that it asked the Bank of England to prohibit issuance of any foreign loan in London with a maturity below 20 years. However, high interest rates and restrictions on foreign companies did not stop British investors from buying new securities. British investors' enthusiasm for alternatives to War Loan became apparent immediately after the end of the war. Some 2,200 companies were formed in 1919 and 1920. That compares with an average annual rate of corporate formation in the two years that followed – years of deep recession – of 330 each.[394] By 1920, Britain's capital market was congested, filled up by the pent-up demand of companies unable to raise capital during the war years, and when that

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[391] Morgan, *Studies in British Financial Policy,* 264.

[392] J. Atkin, 'Official Regulation of British Overseas Investment, 1914–1931', *The Economic History Review*, 23.2 (1970), 325.

[393] Atkin, "Official Regulation" 326.

[394] Rutterford, et al, 'Who comprised the nation of shareholders? 160.

collapsed in 1921 as the recession, deflation and unemployment set in, the Bank did not change its attitude towards foreign borrowers.[395] Still, interest rates remained high in 1920 and 1921, leaving Britain to attempt a refinancing with Treasury bonds with a coupon of 5½%. The effect of these rates can be seen in prices for the 5% War Loan 1929–47, which traded at a loss to face value until 1922.[396]

In the afterwar years, investors were able to buy into companies engaged in 'new' industries such as automobiles, synthetic fibres, rubber for tyre manufacture and electrical engineering. The investment was substantial and broadly, it doubled the value of the asset base in these industries between 1920 and 1938. However, investment in Britain's mature industries – including shipbuilding and engineering– attracted much less capital. The latter two were only able to see their capital investments expand by 46 and 20 per cent respectively. The effects of the post-war boom and bust can be seen in the levels of capital raised on the London Stock Exchange. In 1919 and 1920, capital raised totalled £28.1 million and £63.5 million respectively. In 1921, as the recession hit, that fell back to a mere £6.1m, recovering to £21.1 million in 1922. Capital raising did not exceed the level of 1920 until 1928, a year associated with an unusually high number of corporate failures of companies making their first Stock Exchange debut.[397] Nevertheless, despite the collapse of Britain's economy in 1920–21, the decade 1918–1928 delivered real annualised rates of return of 10.3 per annum, the highest real rates of return on equities in the UK of any decade in the twentieth century until the years 1958–68, according to data from Barclays Research.[398] Further evidence that War Loan capital was recycled into equities comes from research by Peter Scott into the emergence of what became known as 'the cult of equity' among insurance companies found that British insurers began to unravel the holdings they had been pressed to keep during the First

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[395] Atkin, "Official Regulation" 326–7.

[396] Ellison and Scott, 'Managing the UK National Debt 1694–2017'.

[397] David Chambers, 'New issues, new industries and firm survival in interwar Britain, (Oxford: Department of Economics, University of Oxford, 2007) http://12.161.242.125/dotAsset/c3c87aaa-a668-413b-aece-d377cffbc654.pdf (accessed 3 June 2019).

[398] Barclays Research, *Equity Gilt Study 64th Edition* (April 2019), 99.

World War. Insurers had net disinvestment in government securities by double digit rates in the years 1926–1930. Over roughly the same period, investment in ordinary shares grew each year at double digit rates.[399] Given that the insurance industry was disproportionately on London, this might account for at least some of the relative geographic shift.

Clearly, there was strong demand for Stock Exchange-listed securities. The capital raised to buy these may have come from sales of War Loan. Nevertheless, it was clear that by the years 1919–32, investors had far more choices available to them than they had at any time during the years 1914–18. War Loans were far from their only option and the geographic shifts seen in the third sample may well reflect investors ability to choose more widely, selling their War Loan in favour of new opportunities. In the post-war period, the distribution of both income and wealth, highly unequal at the outbreak of war, continued to shift. The cost of living index by 1923 was a third lower than it had been two years earlier.[400] But different groups were affected differently by the deep recession. Middle-class owners of property were affected by war even before 1920 by restrictions on rent increases during the inflationary war years.

John Allen points out that while war was clearly good for some owners of capital, rising taxes and government efforts to limit inflation were bad for others, particularly landowners. While agricultural commodities commanded higher prices during war, limits on rents and the rising costs of maintaining estates encouraged landed gentry to sell out and left them with liquid capital to invest. 'Big houses went out of favour,' he points out, noting that the inability to hire staff and the fact that tax on these had been raised, made them undesirable. 'No doubt a new class of rich person was coming into existence, as usually happens during a war, but the old rich class, such as the country gentlemen, who depended upon agricultural rents, found it impossible to pay both a trebled income tax

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[399] Peter Scott, 'Towards the cult of the equity? Insurance companies and the interwar capital market', *Economic History Review* 55 (2002) 78–104. Data from Board of Trade returns in Table 2A.

[400] McKibbin, *Classes and Cultures*, 52–54.

and the doubled cost of maintaining a large establishment.'[401] Allen also points out that some shareholders did badly out of war, too. Among the classes of corporate shares that did particularly badly out of war are some that would have been considered 'safe' before 1914 such as British Railway debentures and corporate securities. Across a group of 56 stocks, which also included government and colonial securities, the fall in capital value was roughly 26.1 per cent.[402]

Citing Bowley, Waites notes that war had a particularly harsh effect on 'elderly members of the middle classes whose investments were completed before 1913, usually at a fixed rate of interest.' There had also been a visible fall in the standard of living of the professional classes. For example, senior civil servants who had been on salaries of £500 pre-war saw pay rise by only 42 per cent, while the actual cost of living had doubled. As Allen pointed out, purchasing power had been transferred from groups of shareholders such as those with railway stocks to some sections of the labour force. The effects of inflation combined with much higher levels of taxation reduced the numbers of the rich – defined as those with £10,000 to spend in 1914 and the equivalent amount in 1925 – from 4,000 to 1,300.[403] However, he also suggests that some of that contraction of the wealthy upper class may have been more apparent than real. The effect of sharply higher taxes, for example, was mitigated by the ability of the wealthy to give gifts to heirs while still alive and the establishment of family trusts and other creative devices allowed many to skirt new impositions. Equally important, he wrote, was the fact that 'war finance created an increasingly profitable field of new investment which compensated some *rentiers* for the loss of overseas investment income and the decline of domestic stock.'[404] All of these factors would have affected the ability and the desire of various holders of capital to either take up more War Loan or to raise cash by selling the holdings they had. Within

[401] Allen, 'Some Changes in the Distribution of the National Income', 92.

[402] Allen, 'Some Changes in the Distribution of the National Income', 93.

[403] Waites, *Class Society at War,* 83. Cites A.L. Bowley, A.L. (1930) *Some Economic Consequences of the Great War,* (London, Thornton, Butterworth, 1930), 77.

[404] Waites, *Class Society at War,* 86.

certain groups, there would have been a geographic bias. In the second sample, for example, nearly a third of all investors engaged in farming were based in the southwest and Wales. Only a fifth of 60 farming investors came from the north east and north west combined. This may account for the significant increase in the density of War Loan holdings in the south west in the second sample; by the time of that sample, densities of holdings were at one War Loan per 21 head of population compared with one per 18 head of population in London where government stock was most densely held.

The change in the fortunes of some investor groups along with the expansion of choices available to investors coincided with a severe contraction in Britain's core export industries, especially the geographically concentrated ones which had been so profitable in wartime. One significant factor was British monetary policy. M.E.F Jones notes that Britain's decision to revalue sterling, raising its level to the pre-war parity with the United States dollar at a rate of $4.86 to the pound and to return to the Gold Standard, was particularly harsh on industries based in a concentrated geographic region. In calculating the regional effects of the sterling revaluation, Jones shows that no industries suffered more on export losses than that those of north west England. Cotton lost £33.4 million and 48,031 jobs. Cotton yarn and cloth were an important part of Britain's trade in the pre-war years, but the ability to export mattered even more for Lancashire cotton producers than it did for Britain; cotton yarn and cloth were roughly 24 per cent of UK exports in 1910.[405] The industry had boomed in the late nineteenth century, but it ignored technological innovation in the pre-war years and allowed Japan to gain a competitive edge. [406] There is little doubt of cotton's significance to Britain and to Lancashire in particular.[407] By 31 July 1920, 46 per cent of the spindles in the cotton industry and 14

[405] Gibson and Lazonick, British Cotton Industry', 16.

[406] Gibson and Lazonick, 'British Cotton Industry', 23.

[407] S. Toms, 'Oldham capitalism and the rise of the Lancashire textile industry' Working Paper, Department of Management Studies, University of York, 1–29. The 1911 Census found that 3.0 per cent of workers were cotton operatives but that 83 per cent of these lived in Lancashire. A refinancing boom in 1907 altered the ownership structure of the industry so that it became dominated by financiers. A new round of re-financing in 1920 led to over–capacity.

per cent of the weaving looms had been financially ‘reconstituted’, allowing a withdrawal of capital.[408] Sellers, therefore, were cash-rich, and in the deflation that followed, War Loan would have looked an attractive alternative. Shipbuilding, singled out for the most egregious excess profits during the war, was a notable example of another industry unable to maintain its wartime rates of return on capital. By 1920–32, the fortunes of the shipping industry no longer made it practicable for reinvestment of profits into that business. Britain’s share of the global shipping market was undermined when much of the world market was closed to British producers, and after a brief post-war recovery, fell much further as other nations sought to build their own competitive industries by offering subsidies to shipbuilders. By 1937, the percentage of British-built ships entering British ports had fallen to 55.8 per cent from 65.8 per cent in 1913. Foreign ships whose governments provided subsidies – principally France, Germany, Japan and the United States – saw their market share more than double to 17.2 per cent.[409] Iron and steel also sustained heavy losses, giving up even more jobs – 24,524 – than did wool, but marginally lower export losses of £14.1 million. Coal, too, was deeply affected, with exports falling by £13.6 million and job losses of 64,838. ‘That an overvaluation of sterling in the later 1920s worked to the disadvantage of ‘outer Britain’ cannot be refuted’ Jones concluded. But in the late 1920’s there was already excess global capacity to the so-called staples of ‘outer Britain’, especially for shipbuilding and iron and steel, and global demand for coal was also declining. Overall, while Britain’s decision to revalue sterling did not alone create regional disparities – a fact recognised by creation of Special Areas designations in 1934 –it apparently accelerated the pace of regional decline.[410] The geographical regions most affected by the sterling revaluations were those which were home both to the four core export industries and the core of investors in War Loan in the years 1919–32.

[408] G.W. Daniels and J. Jewkes ‘The Post-War Depression in the Lancashire Cotton Industry’, *Journal of the Royal Statistical Society*, 91.2 (1928) 153–206. In the years 1919–20, 42 per cent of spinning capacity was sold.

[409] Lorenz, “An Evolutionary Explanation for Competitive Decline”: 914–16

[410] M.E.F. Jones, ‘The Regional Impact of an Overvalued Pound’, *The Economic History Review*, 38.3 (1985), 393–401.

Several of the industries that profited most from war had structural deficiencies of their own before 1914 which were likely hidden by wartime demand. But in the aftermath, coupled with Britain's loss of its export markets, they could hide no longer. Citing a government index of prices, Marwick calculates the post-war economy's peak at 265.1 and its crash to 131 in 1922. 'The froth was off the pint, and what lay underneath was worse than anything purveyed under liquor control. Old markets had gone, others had shrunk; the world had too many ships, preferred oil to coal, was trying to operate the delicate nineteenth-century supply and demand mechanism when the conditions in which that had worked not too badly had been irreparably shattered,' he declared. Unemployment, which had averaged 3.1 per cent in the second half of 1920, rose to 13.8 per cent in 1922.[411]

Capital Recycling

The evidence from the third sample points to a significant withdrawal of capital by those who earned profits from businesses and industries which had done well out of war and recycled that capital into War Loan during the years 1919–32. As export industries contracted, unemployment soared, and deflation took hold. So strong was demand for War Loan that after rising to par in 1922, it did not trade at a discount to face value through the end of the sample period. Debt service on War Loan was a significant percentage of tax revenue collected. In 1925–26, it was equal to roughly 40 per cent of tax revenue.[412] (See Chapter 6). The third sample is also characterized by the return of institutional investors who collectively provided over a quarter of the capital in the sample. Of the 39 institutions, 29 are for-profit financial or industrial institutions.

In this section, I will show how the process of recycling occurred. For the purposes of a simpler analysis, I have divided the industries likely to have benefited from war into two groups; the first of these are the key export industries of ships, coal, iron and steel and

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[411] Marwick, *The Deluge*, 323.

[412] F. Capie, T.C. Mills, M.J. Thomas, G.E. Wood, '*Was the War Loan Conversion a Success*?', Centre for Banking and International Finance, (London: The City University, 1983), 2.

cotton, wool and textiles. The second group are those identified by Josiah Stamp as benefiting from 'spill over' effects of wartime restrictions on the wider economy. The latter include grains and food, leather boots and clothing, chemicals and soap and brewing, distilleries and confectioners. I have included another group identified by Stamp benefiting from the high internal mobility of the wartime population: that of pub and hotel operators. (Chapter 6) Farmers have been included as war profiteers due to sharp rises in commodities prices. Within each sample, the contribution from investors with connections to businesses benefiting from war have been expressed as a percentage of the total capital within that sample and as a percentage of the capital whose source can be identified.[413]

Table 5.4 shows the irregular, but generally progressive, increase in the percentage of capital coming from those whose primary business appears to be in one of Britain's core export industries made highly profitable by war. These are also the sectors which fared worst in the interwar period.

[413] This is explained in Appendix 1: Methodology

Table 5.4: Core War Industries and Percentage of Capital from Connected Investors

	3½% War 1925-28			
	Cotton, Wool, Textiles	Ships & Shipping	Coal	Iron & Steel
Total Capital in Sample (£s)	2,2245,97	2,224,597	2,224,597	2,224,597
Total Identifiable Capital (£s)	1,442,720	1,442,720	1,442,720	1,442,720
Total Capital From War Industry (£s)	34,950	89,300	5,062	4,500
% Identifiable Capital from War	2.4	6.2	0.4	0.3
Median Buy Full Sample (£s)	200	200	200	200
Median Buy War Industry (£s)	1,000	2,350	500	500
	5% War 1929-47			
	Cotton, Wool, Textiles	Ships & Shipping	Coal	Iron & Steel
Total Capital in Sample (£s)	2,217,464	2,217,464	2,217,464	2,217,464
Total Identifiable Capital (£s)	1,295,623	1,295,623	1,295,623	1,295,623
Total Capital From War Industry (£s)	27,757	55,285	16,533	4,866
% Identifiable Capital from War	2.1	2.5	1.3	0.4
Median Buy Full Sample (£s)	250	250	250	250
Median Buy War Industry (£s)	779	816	358	200
	Converted to 3½% War			
	Cotton, Wool, Textiles	Ships & Shipping	Coal	Iron & Steel
Total Capital in Sample (£s)	3,183,214	3,183,214	3,183,214	3,183,214
Total Identifiable Capital (£s)	2,682,265	2,682,265	2,682,265	2,682,265
Total Capital From War Industry (£s)	86,018	177,978	259,520	26,734
% Identifiable Capital from War	3.2	6.6	9.7	1.0
Median Buy Full Sample (£s)	400	400	400	400
Median Buy War Industry (£s)	1000	1250	852	1101

Britain’s core export industries were not the sole beneficiaries of soaring wartime demand. As Josiah Stamp, noted that there were a range of smaller industries that also became extremely profitable during 1914–18. When investors in these more peripheral industries are added to the totals, it appears that a significant minority of capital whose source can be identified came from investors who likely did well out of the First World War. Indeed, in the first two samples of 3½% War Loan and 5% War Loan, the capital coming from those engaged in the ‘peripheral’ businesses identified by Stamp is

Table 5.5 Peripheral War Industries and Percentage of Capital from Connected Investors

	Grain & Food	Leather Boots & Clothes	Chemical & Soap	Brew., Distill., Sweets	Farmers	Pub & Hotel
			3½% War 1925-28			
Total Capital in Sample (£s)	2,2245,97	2,224,597	2,224,597	2,224,597	2,224,587	2,224,587
Total Identifiable Capital (£s)	1,442,720	1,442,720	1,442,720	1,442,720	1,442,720	1,442,720
Total Capital From War Industry (£s)	13,367	11,754	1,307	106,550	28,861	2,739
% Identifiable Capital from War	0.9	0.8	0.1	7.4	2.0	0.2
Median Buy Full Sample (£s)	200	200	200	200	200	200
Median Buy War Industry (£s)	300	200	150	800	500	220
			5% War 1929-47			
Total Capital in Sample (£s)	2,217,464	2,217,464	2,217,464	2,217,464	2,217,464	2,217,464
Total Identifiable Capital (£s)	1,295,623	1,295,623	1,295,623	1,295,623	1,295,623	1,295,623
Total Capital From War Industry (£s)	16800	48762	7361	15553	37512	4570
% Identifiable Capital from War	1.3	3.8	0.6	1.2	2.9	0.4
Median Buy Full Sample (£s)	250	250	250	250	250	250
Median Buy War Industry (£s)	200	421	1053	375	211	350
			Converted to 3½% War			
Total Capital in Sample (£s)	3,183,214	3,183,214	3,183,214	3,183,214	3,183,214	3,183,214
Total Identifiable Capital (£s)	2,682,265	2,682,265	2,682,265	2,682,265	2,682,265	2,682,265
Total Capital From War Industry (£s)	68819	70623	40267	21541	42863	6662
% Identifiable Capital from War	2.6	2.6	1.5	0.8	1.6	0.2
Median Buy Full Sample (£s)	400	400	400	400	400	400
Median Buy War Industry (£s)	500	1000	3880	850	500	500

even greater than that coming from the ‘core’ industries that were most profitable during 1914–18. Presumably, during those years, owners and employees within those sectors would have preferred to re-invest capital into their own businesses. Tables 5.4 and 5.5 showing the respective contributions from those connected with these industries makes this point. In the first sample, a particularly large purchase of War Loan by the brewery company, Bass, inflated the amount of capital coming from peripheral businesses. In the second sample covering years 1915–1924, makers of boots and clothing, identified by Inland Revenue as particularly profitable during war years, accounted for a larger contribution of capital to War Loan than investors connected to any other industry. Farmers were not far behind.

Table 5.6 Summary of Capital Recycled from War Industries

3½% War Loan 1925-28	
Total Capital (£s)	2,2245,97
Total Identifiable Capital (£s)	1,442,720
Total from Core Industries (£s)	133,812
Total Peripheral Industries (£s)	164,578
Core and Peripheral Industries	298,390
Percentage Identified Capital from War	20.7
5% War Loan 1929-47	
Total Capital (£s)	2,217,464
Total Identifiable Capital (£s)	1,295,623
Total from Core Industries (£s)	104,441
Total Peripheral Industries (£s)	130,558
Core and Peripheral Industries	234,999
Percentage Identified Capital from War	18.1
Converted to 3½% War Loan	
Total Capital (£s)	3,183,214
Total Identifiable Capital (£s)	2,682,265
Total from Core Industries (£s)	550,250
Total Peripheral Industries (£s)	250,775
Core and Peripheral Industries	801,025
Percentage Identified Capital from War	29.9

But by the time of the third sample covering years 1919–32, the ‘core’ war industries were failing to produce returns on capital that resembled those of the war years. In this sample, the source of 85 per cent of all capital invested in War Loan has been linked to an industry or the occupation of the investor. In this sample, 30 per cent of capital is clearly identified as coming from war-linked industries, and two thirds of that from the core export industries. Of the £801,025 in War Loan purchases, roughly £550,000 came from investors engaged in these core industries. Of that, nearly half came from those engaged in the coal mining sector. These results can be seen in the summary, Table 5.6.

Digging deeper into the sample of post-war investors, the explanation for the geographic shift out of London and to the north east and north west and to Scotland is consistent with the pattern of capital re-cycling. That is because those whose livelihood – or fortunes – came from the four core export industries lived near their businesses. Perhaps no sector illustrates this more clearly than coal. Among investors in the coal industry, no better example of this capital re-cycling exists than that of Frank Robert Simpson, mining engineer living in Bradley Hall, Wylam, Northumberland and John Simpson, mining engineer living in Monkseaton. Their investment totalled £207,199, making it the single largest by a retail investor in the entire sample. It had been transferred into the ledger following an earlier purchase in 1926. Both are listed in the ledger as 'Trustees of John Bell Simpson' who, according to the website of the Durham Mining Museum, was a prominent mining engineer and coal mine owner. Records from the 1911 Census showed he also lived at Bradley Hall, Monkseaton. Graces' Guide to British Industrial History notes that John Bell Simpson was managing owner of the Stella Coal Co in addition to his role as a mining engineer.[414] He was also chairman of the Elswick Coal Co Ltd and a director of the Wallsend & Hebburn Coal Co Ltd.[415] He died at his home, Bradley Hall, Wylam-on-Tyne in April 1926, just before the date found in the ledger that £200,000 of War Loan was purchased for the account of the two other Simpsons.[416] This suggests that

[414] 1891 England Census, Staffordshire, Burntwood, District 14, 53. Stella is the name of Robert Frank Simpson's young daughter.

[415] Durham Museum of Mining, Who's Who on John Bell Simpson, http://www.dmm.org.uk/whoswho/s922.htm It cites entries from the *1923 Colliery Book and Trades Directory.*

[416] Grace's Guides to British Industrial History. https://www.gracesguide.co.uk/John_Bell_Simpson (accessed 17 September 2019).

the funds for investment were inherited. The ledgers show that the holding was slowly dissipated through January 1930, past the first date at which Treasury could have redeemed the issue. At that date, the remaining £115,042 was converted to an issue of 5% bonds.

Mining records offer clues explaining why investment in 5% War Loan was preferable to investment in coal. At Elswick Colliery, where John Bell Simpson, Frank Robert Simpson and John Simpson were directors, 542 men were employed underground in 1923 and a further 124 above ground. That was a better post-war year for British coal because of the occupation by French troops of the key coal-producing Ruhr Valley in Germany and the resulting strike by workers had slashed competing German coal exports. By 1925, however, the number employed underground had fallen to 516 and by 1930, to 379. By the first nine months of 1927, the Northumberland and Durham coal mines were loss-making on a scale that would have required massive pit closures.[417]

The pattern is similar among other export industries; of 30 War Loan investors whose income or wealth relate to cotton, wool or textiles, only two – the daughter of a cotton manufacturer and a merchant of cotton and woollen goods – are based in London. There are 12 each from the north east and north est. Of 24 investors whose income or wealth come from shipping or shipbuilding, only two are London-based. One of these is a company providing stevedore and docking services while the other is an investment group led by the daughter of a shipping broker. Scotland is home to nine of these investors while Wales accounts for a further five. Moreover, there is evidence that points to significant stakes in War Loan held by investors in the shipping and coal industries outside of the sampled group. An internal memo prepared by the Bank of England as Treasury officials which contemplated restructuring the 5% War Loan shows significant stakes of over £500,000 owned by both the shipping and coal industries. While their

[417] No Author, "Miners' Wage Reductions", *The Economist*, 102–103, 18 February 1928. The independent chairman of the Durham and Northumberland mining wage agreed to further reductions in mine worker's wages, providing 'a disquieting reminder of the deplorable conditions which the unrelieved depression of the coal industry in the North Eastern area is creating for the mine workers.' Losses on Durham mines in January-September were £660,000.

ownership was dwarfed by that of the banking industry by the end of December 1931, the two groups held large shares totalling £2,562,786 and £1,908,367 respectively.[418]

But the spill over effects of the wealth and profits associated with industries that benefited from wartime demand is also evident in the ledgers of the third sample. The trading accounts of two firms of stockbrokers, one based in Dewsbury and Huddersfield, the other concentrated in Huddersfield, West Riding, point to spectacular volumes of liquid wealth changing hands in the post-war period. Dewsbury, in the West Riding of Yorkshire, and Huddersfield were closely connected with the 'low woollen industry' in which reprocessed woven and knitted fabrics were used to produce cheap woollen fabrics for the mass market.[419] While the industry grew from 1850 to 1914, it declined sharply in the afterwar period.[420] In the ledgers, the two Dewsbury-based stockbrokers, Benjamin Siddall Knowles and Frederick Pestell, who are business partners, list their occupations as 'Gentleman'. The ledgers show that they purchased and sold £73,518 of securities within a few weeks in late 1926, a trading pattern more likely to be that of a stockbroker than of an end-investor. The 1911 Census identified Mr Knowles as aged 44 at that time, married, and a broker in stocks and shares.[421] By tracing his accounts through the ledger over time, it becomes apparent that between 20 May 1925 and 13 January 1926, he and his business partner had bought and sold £98,871 of War Loan. Between January 1926 and 3 July 1926, they had bought and sold a further £85,360 in securities. Nor are these stockbrokers alone. Another investor in the third sample, Samuel Frederick Sykes, who also describes his occupation as 'Gentleman', is a similar case. In the 1901 and 1911 England Censuses, Mr Sykes was living with his parents in Huddersfield and employed

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[418] BoEA, AC19/775 '3½% War Stock formerly 5% War Stock 1929/47, Memorandum to the Chief Cashier, An analysis of holdings of 5% War Stock, Inscribed and Registered, of £500,000 and upwards' from Chief Accountant's Office, 06 December 1931.

[419] John Malin, 'The West Riding Recovered Wool Industry, ca. 1813–1939', PhD thesis, University of York, 1979, 9.

[420] Malin, 'The West Riding Recovered', 516. Exports of woollen fabrics fell from 187,233 square yards in 1920 to 119,357 by 1926.

[421] 1911 England Census, Yorkshire-West Riding, Dewsbury, Dewsbury, 18, 574.

as a clerk in a firm of stockbrokers.[422] At his death in February 1966, he left an estate of £21,107.[423] The trading pattern of this account points to his role as a stockbroker. Ledgers show that he was a buyer of a total of £266,694 in securities between 5 June 1923 and 02 July 1923. By 8 November 1924, the investor had increased his holdings of War Loan from £1,118 on 18 August 1923 to £125,111 by 8 November 1924. The trading patterns of both stockbroking groups point to the availability of large pools of liquid wealth seeking homes during the 1919–32 sample period. That is consistent with operators in a once-profitable sector liquidating their stakes, investing proceeds in low-risk securities.

Conclusion

The geographic shift seen over the course of the entire 1914–32 period shows a sharp turn away from the traditional home of investors in government securities based in London and the South East of England. Thus, there is significant evidence that the rise of the fortunes of those engaged in industries benefiting from war time demand, and their subsequent fall thereafter may well account for the sharp geographic shift in War Loan holdings over the relevant period 1914–32. It is not only those businesses or individuals employed in war-related industries; hefty investment to expand these businesses and government orders for products these produced would have had 'multiplier' effects for the surrounding areas. Indeed, this explains the presence of brewers and other operators of hospitality centres in Stamp's description of industries capable of earning excess profits in wartime. It also would have led to increased spending in shops for groceries and clothing by working-class employees of these businesses as disposable income rose. But the collapse of rates of return in these core war-related businesses (Chapter 6) would have persuaded their owners to withdraw their capital in favour of investments that were less sensitive to the deflation and severe unemployment which characterised those regions during the years 1919–1932.

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[422] 1901 England Census, Yorkshire, Almondbury, District 11, 11. 1911 England Census, Yorkshire-West Riding, Almondbury, 04, 540.

[423] England &Wales, National Probate Calendar, 1966, Saban-Szypka, 412.

The First World War reshaped Britain's economy in many ways, some of which were a function of external forces such as protectionist measures by competitor nations. Most, however, were internal, reflecting changes in taxation, modest extensions of state insurance programs in health, unemployment and pensions, and the use of monetary policy to support the sterling exchange rate. Additionally, underlying weaknesses in core export industries, masked by wartime demand, resurfaced after the armistice. British production in sectors such as shipping, coal and textiles were eclipsed by more competitive foreign producers. While new industries sprung up, these did not have the geographic concentration of pre-war core industries and thus did little to supply employment to those no longer able to count on work in coal mines or iron factories. Investors in those industries, seeing that the source of high rates of return from older industries was likely gone for good, crystallised what profits they could and invested in assets that would produce income with certainty. It is this capital recycling that accounts for at least a portion of the very significant shift in the geography of investment in the interwar years.

Britain was more fortunate than almost all other combatants in its ability to find buyers with private financial capital for its huge overhang of War Loan in the decade which followed. Unlike almost all other combatants, it did not repay its domestic debt with confiscatory inflation generated by a wildly expanded money supply. However, it had to service, and ultimately repay, what turned out to be unmanageable amounts of capital. In the next chapter, I will look closely at the economic, social and political battle over how War Loan should be repaid, and by whom.

CHAPTER 6
The War After

The years 1919–32 were, in part, a battle over how to pay for war. On one level, the battle was fought on the fiscal front; how should the burden of taxation needed to repay war debts be shared? But on another level, the battle was about what, exactly, Britons had fought for and sacrificed for, during wartime. Would the powerful economic, social and political forces unleashed during wartime alter Britain's economy and its distribution of wealth or were these temporary effects of war that would ultimately allow the nation to return to its pre-war Edwardian demarcations of social class, wealth and income? Would the monumental effort to repay the staggering burden of war debt force changes in Britain's economic and social structure that could not have been imagined in the years before 1914? Ultimately, I will conclude that the answer to the first question is a modified 'No' while the answer to the second is a modified 'Yes'. Over the longer term, these forces continued to slowly work their way through Britain's economy up until the Second World War, after which creation of the modern welfare state became inevitable.

This chapter will look at four aspects of the post-war period covered by the third sample of War Loan investors; it will look first, at the economic and fiscal challenges facing Britain and how these were affected by the nation's changing political complexion. It will examine the debate about who should bear the burden of repaying war debt. It will do this in the context of the nation's core export industries which had done well out of war, and which were the source of a significant minority of capital loaned to finance the costs of war. Second, it will consider how changes in taxation and in social spending might have affected decisions to buy and sell War Loan by investors during the years of the third sample, 1919–32. Third, it will look at potential tax leakage from the peculiar structure of most War Loans which, in practice, was capable of depriving government of revenue that was badly needed. These tax revenues were not only used to put a safety net under the living standards of millions of unemployed workers but also were needed to pay interest on the huge overhang of War Loan. Finally, it will explore conversion of the weighty 5%

War Loan 1929–47 into a perpetual security paying interest at 3½% and which was not redeemed until 2015.

Economic changes in Britain

Every national combatant in the First World War experienced significant economic upheaval that would destabilize public finances and private wealth, and alter the balance of international trade and industry. Britain was no exception. The changes the nation underwent in the years after 1919 influenced the decisions that were made about how to manage the national debt and the nation's economy in general. It is impossible to consider Britain's political response to its overhang of War Loan, and investors' reaction to it, without considering the general economic circumstances in which the nation found itself.

The immediate post-war period was one of great optimism. Indeed, chroniclers of the immediate post-World War I era note the euphoria which greeted the end of war, accompanied by a burst of pent-up demand for goods and services from the private, not the government, sector. From the end of the war until the late summer of 1920, Britain experienced a boom which manifested itself in inflation even higher than that during wartime and an accompanying rise in wages. The index number of prices, registering 192 in1918, rose to 206 in 1919 and peaked at 265.1 in April 1920.[424] Wartime labour shortages had hardened the effectiveness of organized labour and in the boom years, wages rose sharply, too. Between 1914 and 1920, the average income of all working-class families broadly doubled, cancelling out the effects of the rise in prices.[425] Wages continued to rise in some industries into 1920, even as sectors such as the boot and leather shoe trades and the cotton weaving industry softened; changes in rates of wages in June 1920 resulted in a total increase in wages paid to 2.6 million workers of £570,000 per week.[426] Private investment was financed through the issuance of new shares, as well

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[424] Marwick, *The Deluge:* 323.

[425] Marwick, *The Deluge*, 312.

[426] Economist, "Employment in June", *The Economist*, 24 July 1920, 140.

as by advances from banks. Commercial discounts and advances rose by about £450 million between the beginning of 1919 and April 1920.[427] In this private sector-driven boom, investors lost interest in Government securities. The price of the 5% War Loan 1929–47 went from just below its issue price of 95p to trade at 94.25% in November 1918 to a trough of 82.8125% of face value in December 1920.[428] The latter price implied that investors demanded a yield of 7.03% before they were prepared to buy new securities.[429] Those who bought War Loan in early 1917 would face a capital loss if they sold at that time.

The immediate, and relatively short-lived post-war euphoria could not counteract the slump in demand which quickly followed. The contraction chiefly affected Britain's four core export industries upon which it had become very dependent for foreign exchange revenues in the nineteenth century. Britain's role at the centre of world trade was eroded. Particularly hard hit was demand from war-stricken European customers. The higher wages and shorter working weeks that British workers were able to achieve during war not only fed inflation, but also ate into corporate profit margins. During the interwar period, Britain's share of total world export trade fell from 14 per cent in 1914 to 9.8 per cent by 1937. Oil and electricity were substituted for coal while British exports of cotton pieces fell to 10 per cent of their pre-war level.[430] Core export industries which had soaked up so much labour during the war years found demand for their output disappearing. *The Economist*, citing recently published figures for iron and steel production in 1921, noted the sector had the lowest output for any year since 1850. Industries closely associated with iron and steel – such as shipbuilding, engineering and iron and steel production – were responsible for half the nation's unemployment. Iron and

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[427] Morgan, *Studies in British Financial Policy*: 375

[428] Martin Ellison and Andrew Scott, 'Managing the UK National Debt'

[429] As calculated by this on-line tool: http://www.candidmoney.com/calculators/investment-redemption-yield-calculator.

[430] Sean Glynn and John Oxborrow, *Inter-War Britain: An Economic and Social History*, (London, Allen & Unwin, 1976), 89.

steel exports to Europe in 1921 were only a fifth of their pre-war level.[431] By 1923, export revenues were only 74.5 per cent of their 1913 level, although imports were at 93.0 per cent of their pre-war levels.[432] Unemployment rose sharply. After having been under 1.0 per cent for much of the war, the level began to rise in late 1919, even before the slump was apparent. By the end of 1920, it had reached 7.9 per cent of those covered by an expanded programme for unemployment insurance which was first launched in 1911. By May 1921, unemployment peaked at 23.4 per cent of the insured population.[433] Even workers who did not lose their jobs faced demand from employers to accept deep wage cuts, in line with the onset of deflation and plummeting profits, a move which prompted strikes in key industries.

The most contentious of these involved the coal industry in which a threat of industrial action risked sparking off a much wider, national general strike affecting core services in Britain. Tensions between Britain's working classes and the middle classes were exacerbated by these threats. The middle classes, by Ross McKibbin's account, were those who felt that unlike the working classes, they were not entitled to assistance from the state, no matter how difficult their circumstances. 'The members thus had in common a powerful grievance; they gave, but did not receive', McKibbin wrote.[434] Ultimately, plans for a general strike were abandoned, but not before government had undertaken elaborate complications which, historian C.L. Mowat characterises as 'not calculated to produce tranquillity'. This required, among other things, a call-up of military reservists, and the requisitioning of motor vehicles.[435] The failure of the 1921 General Strike did nothing to improve Britain's overall economic state. By March 1922, *The Labour Gazette* reported that changes in wage rates had prompted a net reduction of over £390,000 in the weekly full-time wages of more than 2,400,000 workers. Coal miners sustained pay cuts

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[431] No Author, "The Depression in the Iron and Steel Industry" The Economist, 11 February 1922, 221–22.

[432] *Proceedings of the Committee on National Debt and Taxation*, (London, HMSO 1927) Testimony of Mr W.T. Layton, CBE, 5 August 1924.

[433] Morgan, *Studies in British Financial Policy:* Table 1, 70.

[434] McKibbin, *Classes and Cultures:* 44.

[435] Mowat, *Britain Between the Wars*, 119–22.

of 2.0 to 8.0 per cent while the pay of steel smelters was cut by 33.75%. In reporting the fall in wage income, *The Economist* noted that the data referred only to full-time work and take no account of incomes lost due to unemployment or short hours.[436] In fact, nothing in Britain's economy appeared immune from the severe slump of 1920–22. Noting that public confidence had been severely shaken by the slump in prices for traded securities on the nation's stock exchanges, *The Economist* pointed out that even the safest gilt-edged securities, which usually see rising demand in an economic slump, had sold off heavily, too. 'In the latest depression, however, the good stocks have suffered with the bad, for people have had to sell anything they could lay their hands upon which could be melted into money,' the magazine wrote, adding that the effective yield on 5% National War Bonds maturing in a year's time at 102 were trading at a price showing an effective yield of 7.8%.[437]

Britain had one more shot at a General Strike, this one in May 1926 and which was not averted but lasted nine days. It, too, had its roots in the woes of the coal industry and led to stoppages in transport, docks, and vans distributing food. Again, it aroused the anger of the middle classes and attracted an army of incensed middle-class strike breakers. These included undergraduates from Oxford and Cambridge Universities and served, in the long run, to embitter both the middle and working classes.[438] After the General Strike collapsed, miners stayed off work until November when they were forced to accept the owners' harsh terms.[439] The aftereffects of the General Strike, and the much longer one in coal mining, were felt by British industry, sowing much ill-will against Labour. *The Economist*, for example, found that by February 1927, iron, coal and steel companies recorded a net loss of £116,800 compared with net profits a year earlier of £993,500.[440] But it had two other consequences; first, it halted the attack on wages. Depreciation

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[436] No Author, "Notes of the Week", *The Economist*, 25 March 1922: 575

[437] The Economist, 'Safety First Bonds', *The Economist*, 25 December 1920, 1122–23.

[438] Mowat, *Britain Between the Wars*, 313–338.

[439] Philip Williamson, *Stanley Baldwin: Conservative Leadership and National Values*, (Cambridge: Cambridge University Press, 1999), 35.

[440] No Author, "Industrial Profits and the Coal Strike", *The Economist*, 12 February 1927.

allowed real wages to rise. Second, it also caused most Labour MPs to abandon calls for their preferred solution for war debts: imposition of a capital levy on wealth. That would have primarily included wealth held by War Loan investors.[441] Moreover, the Conservatives were prepared to put in place some measures that would create a safety net for the working class. This reflected the values of Stanley Baldwin who led the Conservative Party from 1923 to 1937 and who served three times as prime minister.[442] When he became prime minister in 1923, he decided that deflation alone would not cure Britain's economic woes, and moreover, feared that refusal to address at least some working class concerns risked a 'socialist' backlash. He held off other Conservatives seeking further cuts to tax and spending.[443] He also committed his party to several programmes which undercut working class suffering including extensions of unemployment insurance, a housing program, improved infant and maternity care and inauguration of a contributory pension system.[444]

Britain's post-war fiscal position: Paying for war

It was against this backdrop of falling export revenues, rising demands for both higher social expenditure and demands for lower taxes that Britain had to address what Hugh Dalton, the Labour Party economist and politician described as 'this hideous war memorial', that is, the overhang of domestic debt.[445] Indeed, debt and taxation 'were at the heart of post-war politics, placing considerable strain on the fiscal constitution,' according to Martin Daunton's account of fiscal policy in the twentieth century.[446] Debt, in his account, had been a symbol of waste after the Napoleonic Wars in the early eighteenth century, and in 1918, it threatened to become so again. No matter how dire Britain's own domestic economy became, it could not avoid debt repayment.

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[441] No Author, "Labour and the National Debt", *The Economist*, 13 November 1926.

[442] Williamson, *Stanley Baldwin:* 168.

[443] Williamson, *Stanley Baldwin*, 169.

[444] Williamson, *Stanley Baldwin*, 171.

[445] Daunton, *Just Taxes*, 60.

[446] Daunton, *Just Taxes*, 60.

At the end of the 1918–19 financial year, domestic debt totalled £6,142 million at an average interest rate of 4.65%, compared with an average cost of 3.5% before the war. Of that, £957 million was in the form of short-term Treasury bills and a further £455 million in so-called Ways and Means advances, leaving a total of £1,412 million that had to be either repaid or rolled over in the months ahead. In addition, there were £383 million of Exchequer bonds maturing between 1920 and 1922 and £1,636 million of National War bonds due between 1922 and 1929. Altogether, up to 1April 1925, there would be 12 issues of Exchequer bonds falling due and seven issues of National War bonds with a face value of over £1,040 million which must either be repaid or refinanced. Morgan outlined the three-fold challenge facing successive post-war governments on debt management. First, the short-term debt maturing almost immediately after the armistice needed to be repaid or rolled over. Second, there was the need to refinance the very large sums maturing over the next decade and third, ministers needed to find a way to reduce the annual debt service payments.[447] The most pressing debt repayment in the aftermath of war was that of short-term debt, in the form of Treasury bills and Ways and Means advances. Sir Otto Niemeyer, a banker and Treasury official, told a parliamentary enquiry in 1919 that holders of three-month bills could hold Britain to ransom. ‘This,’ he said gives bill holders ‘a purely one-sided option to renew or not.’[448]

Because maturity dates for the 3½%, 4½% and 5% War Loans were concentrated in the years 1925–29 – as were maturity dates for the various series of National War bonds – the average duration of national debt shortened with each passing year. What looked like long-term debt in wartime increasingly took on the urgency of Treasury bills. Indeed, testimony delivered to the Colwyn Committee calculated that between 1925 and 1932, a total of £1,444 million in war-related financings would fall due for repayment, a sum which does not include the £2,100 million in 5% War Loan 1929-47.[449] As the decade

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[447] Morgan, *Studies in British Financial Policy:* 115.

[448] Morgan, *Studies in British Financial Policy*, 142

[449] [449] *Proceedings of the Committee on National Debt and Taxation*, Testimony of Mr W.T. Layton, CBE, 5th August 1924, (London: HMSO, 1927) 115.

rolled on, the due dates of billions of pounds borrowed for war loomed ever closer. Indeed, the entire decade was characterized by repeated efforts to delay days of reckoning for maturing War Loans. The Chancellor sought powers under a new War Loans Act of 1919 to repay war borrowings by means other than use of sinking funds through the War Loan Act of 1919 and proceeded to issue two new securities, known as the Funding Loan and the Victory Loan in 1919. Both were offered as conversion loans to holders of maturing Exchequer bonds and results were considered disappointing. Nevertheless, these helped finance repayment of short-term securities.[450] These were followed in 1921 by a targeted Conversion Loan with a coupon of 3.5% priced to give investors a yield of 5.6% for 40 years. Unlike the earlier loans, this was aimed at holders of National War Bonds which would begin to mature in 1922.[451] Morgan describes the conversion offer as 'a desperate effort', adding that it 'represents the nadir of government borrowing in this period'.[452]

There is an argument that it was precisely Britain's effort to address the most pressing aspect of its war debt – the need to quickly get rid of the so-called floating debt represented by short term instruments – that exacerbated the severity of the 1921–22 slump. This manifested itself in two ways; first, in the post-war boom, when commercial activities were competing fiercely for cash previously invested in Treasury bills, the Treasury found itself raising the bills rate to 6.5% and the Bank rate to 7.0% in April 1920. This was even as signs of the slump were becoming apparent.[453] It remained there

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[450] Hicks, *The Finance of the British Government*, 335–340. The Funding Loan was priced to offer a Gross Redemption Yield (GRY) of *£5 3s 7d* to its first maturity date, while Victory Loan offered a similarly high rate. Both came with a tax fillip; they could be surrendered for death duties not at their *85d* issue price, but at par. This gave a potential 20 per cent pick-up to investors.

[451] Wormell, *The Management of the National Debt*, 427–8.

[452] Morgan, *Studies in British Financial Policy*, 118.

[453] Morgan, *Studies in British Financial Policy*, 375–76.

until April 1921 when it was cut to 6.5%.[454] Not only were the rates 'highly deflationary', but the withdrawal of short-term funds effectively contracted the monetary base, giving the opposite effect of the inflation caused by expansion of the monetary base in wartime.[455] Moreover, Treasury officials who decided to make repayment of the floating debt their top priority may not have even understood that withdrawal from the money market would be deflationary. 'It will be submitted that this operation merely depressed long-term security prices and formed an unnecessary aggravation of the depression,' Morgan concluded.[456] *The Economist*, an ever-present chronicler of finance, saw signs in the British money markets by April 1922 that the continued efforts to repay floating debt were not necessary; demand for bills from commercial institutions had fallen so sharply that banks wanted to roll over new Treasury bills.[457]

By 1923, expenditure on debt service and management accounted for £271.45 million of expenditure while debt repayment accounted for a further £28.54 million, a total of around £300 million or roughly 40 per cent of total expenditure.[458] To service and repay the staggering burden of debt would require some combination of taxation and cuts to spending, the latter eased by the end of war, demobilization and the sale of excess government stocks. But these policies came against a backdrop of a polarized electorate, with demands from one quarter for relief from high wartime rates of taxation and an end to 'wasteful' government spending. From another quarter came demands for increases in

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[454] 'Interest Rates and Bank Rate', Official Bank Rate History, https://www.bankofengland.co.uk/monetary-policy/the-interest-rate-bank-rate. (accessed 17 September 2019)

[455] Hicks, *The Finance of the British Government*, 339.

[456] Morgan, *Studies in British Financial Policy*, 144

[457] No Author, "The Funding Problem", *The Economist*, 8 April 1922, 62-3.

[458] *Proceedings of the Committee on National Debt and Taxation*, Testimony of Mr W.T. Layton, CBE, 5th August 1924, (London: HMSO, 1927) 176. The table lists sums for 1923 under the headings of Internal Debt Service Interest and Management, Debt Repayment and Total Government Expenditure. The numbers respectively are £271.45 million, £28.54 million (total £299.99 million) and £739.02 million.

social spending which could justify the enormous sacrifices made by the working classes during war. The classification of what constituted 'waste' took on stark class overtones, depending on which group was defining it. To the Labour Party, 'waste' constituted the interest payments on War Loans held by *rentiers*, those whose incomes came wholly, or primarily, from the investments they held. As described in Chapters 3 and 4, a minority of under a third of high earners lived only on investment income, but at the higher end of income, most had a significant portion from this source. The government's proposed solution, initially endorsed by mainstream economists, was a levy on capital: those with wealth above either £1,000 or £5,000 would be required to surrender a portion of it.[459] One element of the demand was the need to address public anger over profiteers, who had done so well out of war. But another was, in the words of Ramsay MacDonald, leader of the Labour Party, 'to divide the non-producing parasite dependent upon society from the producer and service giver.'[460] The divide he drew was not between workers and capital but between 'parasites' who lived idly on the proceeds of their invested capital versus producers who owned, operated or worked in, business.[461] Moreover, by using a capital levy to quickly pay down War Loan, taxes levied on incomes could be reduced. Although the Treasury initially endorsed the idea after the war, it backed off after realizing that the sums to be raised would require large-scale securities sales to raise cash, destabilizing markets. Opponents of the levy argued that it would deprive capitalists of funds to invest in business, and encourage inflationary consumption instead.[462] Indeed, these opponents were already incensed over the unprecedented rates of tax imposed to pay for war. One consequence of the need to raise war finance from taxation was the shift in favour of direct taxation and away from indirect taxes. Waites notes that this exacerbated the grievances of middle- and upper-class taxpayers but provided the revenues to meet demands for social expenditure.[463] Those middle- and upper-class taxpayers believed the

[459] Daunton, *Just Taxes*, 66-70.

[460] Daunton, *Just Taxes*, 68.

[461] Daunton, *Just Taxes*, 68.

[462] Daunton, *Just Taxes*, 70.

[463] Waites, *Class Society at War*, 105.

higher taxes reflected 'waste' by government bureaucrats. These bureaucrats, the thinking went, sought to take advantage of the hapless middle classes, who were now threatened by the economic and political gains earned by the working classes during the war years. In the years after the war, class tensions became unbound over issues of tax, spending and perhaps beneath the surface, fears inspired by the newly acquired political power of Labour. This was amplified by passage of the Representation of the People Act in 1918 which enfranchised all men over 18 and adult women with some property aged over 30.[464] McKibbin, in his analysis of post-war Britain, cast the middle-class perception of working classes this way: 'The active fear of the working-class in the 1920's; the sense that there was a lower depth which could sweep away property, decorum, the constitution.'[465]

The 'anti-waste' campaign, aimed at cutting both spending and taxation, stoked class tensions. It was orchestrated by the newspaper barons, Lords Rothermere and Northcliffe.[466] The Middle-Class Union was a movement launched in March 1919 by Kennedy Jones, a publicist who had worked for Lord Rothermere's *Daily Mail* newspaper. Its goal was to lobby for the burden of taxation to be shared more with manual workers while curbing both public expenditure and efforts to nationalize industry. Moreover, it signalled its willingness to mobilize to interfere in the damaging effects of strikes.[467] Thus, curbing government expenditure, rather than a capital levy, was the right answer to Britain's yawning fiscal deficit. To this end, Sir Eric Geddes, the MP and businessman, was appointed by government ministers to head a committee, the UK Committee on the National Expenditure 1921–22 that would look at how tax revenues were spent and suggest cuts. The Committee's work was novel for two reasons; one of these was it was the first time ever a review was undertaken of whole-of-government spending in an environment where an administration was committed to social welfare

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[464] Marwick, *The Deluge*, 63.

[465] McKibbin, *Classes and Cultures, 67.*

[466] Daunton, *Just Taxes*, 75.

[467] Waites, *Class Society at War,* 84–5.

spending that we now associate with modern states. Second, it brought a wide-ranging transparency to government finance in a way that had not been done previously. Ultimately, the greatest spending cuts it recommended were those to the military services. But two areas where spending cuts were recommended – on education and on the construction of housing for the working classes to be rented at sub-market rates – took aim at two reconstruction programmes that arguably, did most to promote social mobility for the working class.[468]

Contemporaneous press coverage suggests that middle-class ire was aimed particularly at public spending on programmes that might do just that. A meeting of the Middle Classes Union in Southport, Lancashire, quotes Lady Askwith, an organizer of the Union, as singling out 'blank cheques to Mr. Fisher and Dr. Addison (framers respectively of legislation expanding education and working-class housing) to do as they liked with.[469] They of the middle classes must do what they could to get rid of the Ministry's doles and subsidies.'[470]

Class tensions prevailing at the time can be seen in contemporary accounts of the debate about taxation and spending. Rothermere's *Daily Mail* used its pages to decry 'predatory taxation' and 'the pain of being squeezed dry between the working-classes and the profiteer.' It suggests that too many of the middle classes refused to join the fight, not because they opposed high taxes but because they secretly wished to be thought of as the upper classes.[471] The movement directed its appeal towards newly empowered women voters. 'Women have felt more keenly than anyone the hardships and unfair burdens

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[468] Geoff Burrows and Phillip Cobbin, 'Controlling government expenditure by external review: The 1921–22 'Geddes Axe', *Accounting History*, 14.3, (2009), 199–220.

[469] Grace's Guide to British Industrial History, George Ranken Askwith. https://www.gracesguide.co.uk/George_Ranken_Askwith. (accessed 16 June 2019). Lady Askwith was Ellen Peel, daughter of Archibald Peel who was nephew to Sir Robert Peel. She married George Ranken Askwith, an English lawyer, civil servant and industrial arbitrator.

[470] No Author, "Lady Askwith at Middle Classes Union", *Lancashire Evening Post*, 7 October 1920, 5.

[471] Editorial, 'The Food Problem' *Daily Mirror*, 05 March 1919, 5.

placed during the last five years on the middle classes,' Mr Kennedy Jones, MP, told a group gathered in London's Cannon Street Hotel. 'We are being taxed out of existence,' Mr Marmaduke Lowther told the same meeting.[472] For its part, the Labour Party was equally strident; Tom Kennedy, MP for Kirkcaldy, addressed the Bexhill members in July 1921, pointing out that workers had been promised that after war was over, they would not return to the conditions that had prevailed before. 'The Government's policy was not a constructive policy; it was destructive in every shape and form.'[473] Tensions between the working classes and the middle and upper middle classes continued all through the decade, even after defeat of the Labour government's brief spell in power in 1924. But the divisions were not just between social classes; they also divided Britain into those whose income was earned in business and industry and those with substantial investment income from 'rents'. The League of the British Commonwealth, for example, used its position to rail against Britain's 'tight money' policy which required high interest rates. Its Chairman, Frederick Thoresby, in an opinion piece designed to solicit new members, decried the relatively small group of financiers who had supported a tight money policy. Thoresby lumped the interests of 'manufacturers, distributors and millions of workers' against selfish financial interests.[474] This tension between those who benefited from the deflationary effects of the return to the gold standard – a group which included War Loan investors – and those who did not, was a theme which continued to resonate all though the post-war years. It continued to dominate much of the discussion about how to dismantle the looming maturity date for the 5% War Loan 1929–47 in June 1929 when some £2,100 million of government credit needed to be repaid or refinanced.

[472] No Author 'Middle Class Union; Women's Importance in New Movement; big City Meeting', *Daily Mirror*, 7 March 1919, 2. In 1901 England Census, Marmaduke Lowther was aged 44, married, living in Dagenham, Essex. Occupation: Steam Ship Broker (worker). 1901 England Census, Essex, Dagenham, District 17, 25.

[473] 'A Bankrupt System: Indictment of the Coalition, Labour MP on the Down', *Bexhill-on-Sea Observer*, 30 July 1921, 5.

[474] Frederick Thoresby 'Inflation and Deflation: How the Nation's Credit Power can be controlled', *Daily Herald*, 10 September 1925, 3.

But the effects of war itself were already changing living conditions for millions. The years 1914–1920 saw, as McKibbin put it, ‘the most significant re-ordering of wealth in recent English history’. This occurred through mechanisms discussed in earlier chapters: inflation, taxation and the pressure of the wartime labour market that forced government to intervene on workers’ behalf in wage disputes. That intervention gave unprecedented power to organised labour. The effects of wartime overall had the effect of distributing incomes to those on the lower rungs of the wealth ladder, McKibbin notes. ‘All … gained at the expense of those above them.’[475] Some re-distribution went sideways; shareholders in re-organised industries such as railways and utilities, certain landowners, holders of foreign bonds, lost all significantly. Many of these had been solidly middle-class before the war. But others gained. These included those well placed to benefit from inflation such as shopkeepers (see Chapter 4).[476] Also in the group were those supplying wartime materials to government; the ‘hard faced men’ whom Stanley Baldwin believed were over-represented in post-war Parliament.[477] It was this group who most encouraged people to see a post-war world as divided between ‘winners’ and ‘losers’, McKibbin wrote.[478] Jean-Louis Robert, notes that portrayal of the profiteer - particularly that in political cartooning – characterised much of the public dialogue about war. Moreover, such cartooning emerged on all sides of the First World War. While the image of the soldier who sacrificed was at one end of the moral arc of war, the profiteer who gained from war was his opposite.[479]

It was against this tension that government sought to find ways to reduce its war borrowings. And although there was hostility to nearly every suggestion about how to

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[475] McKibbin, *Parties and People 41.*

[476] McKibbin, *Parties and People*, 42.

[477] Williamson, *Stanley Baldwin:* 139. Willamson notes that the comment is contained in a November 1917 letter to Joan Dickinson and famously quoted in J.M. Keynes’s *Economic Consequences of the Peace*, (London: Macmillan, 1919).

[478] McKibbin, *Parties and People*, 43.

[479] John-Louis Robert ‘The Image of the Profiteer’ in *Capital Cities at War: Paris, London, Berlin 1914-1919”* eds. Jean-Louis Robert and Jay Winter (Cambridge: Cambridge University Press, 1997), 104–5.

repair government finances, there was no suggestion anywhere that domestic borrowing be repudiated. By 1923, expenditure on debt service and management accounted for £271.45 million of expenditure while debt repayment accounted for a further £28.54 million, a total of around £300 million or roughly 40 per cent of expenditure.[480] was a mainstaythe portrayal of particularly Testimony of Mr W.T. Layton, CBE, 5 August 1924, 174. The table lists sums for 1923 under the headings of Internal Debt Service Interest and Management, Debt Repayment and Total Government Expenditure. The numbers respectively are £271.45 million, £28.54 million (total £299.99 million) and £739.02 million.in political cartooning – characterised much of the public dialogue about war. Moreover, it did so on both sides of the First World War. Throughout the war, the issue of profiteering was raised repeatedly in labour disputes and was a touchstone of political resentments in the years after. Indeed, two of the most charged words of the post-war period were 'profiteer' and 'rentier' (see Chapter 4). After the war, the latter term was particularly taken, pejoratively, to cover War Loan investors. C.F.G. Masterman, who chronicled the attitudes of the embittered middle classes in his account of post-war England, wrote about how that group saw War Loan investors. 'In two half-yearly lumps, the Government pays out interest on over six thousand million pounds, owned by the men who stayed at home while the war was won.'[481] The emotions that both groups aroused became central to not only the emergence of a new political structure but also to the mechanisms Britain would use to cope with its War Loan debts.

It was against this tension that government sought to find ways to reduce its war borrowings. And although there was hostility to nearly every suggestion about how to repair government finances, there was no suggestion anywhere that domestic borrowing be repudiated. By 1923, expenditure on debt service and management accounted for

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[480] *Proceedings of the Committee on National Debt and Taxation*, Testimony of Mr W.T. Layton, CBE, 5th August 1924, (London, HMSO, 1927),176.

[481] C.F.G. Masterman, *England After the War*, (London: Hodder and Stoughton, 1923), 65.

£271.45 million of expenditure while debt repayment accounted for a further £28.54 million, a total of around £300 million or roughly 40 per cent of expenditure.[482]

[482] *Proceedings of the Committee on National Debt and Taxation*, Testimony of Mr W.T. Layton, CBE, 5th August 1924, (London, HMSO, 1927), 176.

The Wealth of War Loan Investors

The ownership of British War Loan took on a particularly political cast during the years 1919–32 not just because of the size of the debt, but because of the redistribution of tax revenue implied by the payments of dividends to holders of War Loan. Sir Frederic Wise, MP, testifying before the Colwyn Committee, said that the £2,000 million in 5% War Loan was held by 3.2 million investors, of whom 2.3 million owned £200 or less each[483]. The question was whether the lion's share was owned by the idle rich to whom the working classes paid taxes or whether it was owned largely by widows and those of modest means with little other regular income. In its final report, the Colwyn Commission concluded, loosely, that it was most likely that interest payments on War Loan involved no redistribution of income or wealth. That was because interest payments came out of income taxes, and more of these were paid by wealthier investors. 'The income tax paying class, to the extent that they are paying their own War Loan interest, are as a class getting no money return on their investment', the report concluded.[484] Hicks notes that the minutes of the Colwyn Committee concluded in 1927 that some 35 per cent of capital was held by individuals, and adds that it was likely that as the decade advanced, the balance increasingly shifted in favour of institutions and against individuals.[485]

The impression that the number of War Loan investors are dominated by those on modest incomes, upon analysis of the ledgers, appears largely correct based on the sample analysis. But so, too, is the other impression that War Loan holders were among the wealthiest households in Britain. The former holds true when the ledgers are analysed by the number of investors. The latter holds true when analysed by concentrations of capital. The analysis of samples from the ledger show a more nuanced picture. For while retail investors account for most individual holdings, over the years 1914–32, the percentage of capital concentrated in large holdings by single institutions or individuals became dominant. This increasing concentration of ownership in the hands of fewer owners has

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[483] Frederick Henry Smith Baron Colwyn, *Report of the Committee on National Debt and Taxation*, (London: HMSO, 1923). Minutes of Evidence. Testimony of Sir Frederic Wise, MP, 155.

[484] *Proceedings of the Committee on National Debt and Taxation*, 99–101.

[485] Hicks, *Finance of British Government*, 354–355.

implications for the broader economy in two ways; first it suggests that even if there were large numbers of widows and spinsters living on meagre income from War Loans, these were a decreasing percentage of debt holders in the after-war period. Second, the high rates of taxation for the wealthiest individuals offered both an incentive – and as will be described later, a mechanism – to avoid paying income tax. Quantifying the tax leakage gains in significance as the debate over tax rates and social spending intensified; creation of a larger revenue base allows for greater division of public expenditure. 'There seems to be no means of measuring the loss, but the evasion of taxation on the 5% loan due to the absence of deduction at the source was undoubtedly very heavy. Tax receipts from abroad in particular were necessarily almost entirely lost,' Hicks wrote in her analysis of UK government finances during the interwar period.[486]

The distribution of War Loan capital matters, first because it is an informal guide to changes in wealth over the period. It is also a signpost to the distributional effects of the War Loan 5% dividend, a payment whose value in real terms grew continuously over the deflationary years to 1932. Investors with larger holdings received disproportionately more dividend income, enabling them to claim a larger share of tax revenues diverted to debt service. When the holdings are broken down further to take account of each investor's total War Loan holding, the skew towards those with very large stakes is shown to become even more pronounced over the entire period, accelerating in the final sample. This becomes obvious when the numbers of those holding War Loan totalling £1,000 or more are compared with those holding lots of £100 or less. The fact that an investor in the ledgers has a total holding of £100 or less of War Loan does not mean that his wealth is limited; it may be invested in land, property or other securities. However, an investor able to purchase £1,000 or more in War Loan is certain to have had substantial income or liquid wealth already. To put the numbers into perspective, Harry Campion calculates that just under 30 per cent of Britain's population aged over 25 owned £100 or more of property as of 1936.[487] Over the course of the entire sample period 1914–32,

[486] Hicks, *The Finance of British Government,* 318.

[487] Campion, *Public and Private Property in Great Britain,* Table 13, 109.

(Chapters 3–5), the concentration of capital in fewer hands continued. The following tables show the respective weightings of very large holdings by men and women in each of the three samples. Holdings of £1,000 or more account for progressively large percentages of capital invested in War Loan.

Table 6.1: Male Retail Investors: Holdings of £1000 or more

	Retail men investors	Number of men holding £100 or more	% men holding £1000 or more	Total men's retail capital £	Total capital of men with £1000 or more £	% of capital held by all men with £1000 or more
3½% war loan 1925-28	1,235	216	17.5	966,457	704.816	72.9
5% war loan 1929-47	1,125	241	21.4	1,423,383	1,175,945	82.6
Converted to 3½%	944	310	32.8	1,577,096	1,368,656	86.8

Women investors, who have generally had more modest median investments across all three samples, follow a similar, albeit less extreme, concentration.

Table 6.2: Female Retail Investors: Holdings of £1000 or more

	Retail women investors	Number of women holding £1000 or more	% women holding £1000 or more	Total women's retail capital £	Total capital of women with £1000 or more £	% of capital held by all women with £1000 or more
3½% war loan 1925-28	863	59	6.8	288,584	111,998	38.8
5% war loan 1929-47	795	101	12.7	451,599	269,944	59.8
Converted to 3½%	986	184	18.7	762,884	503,318	66.0

The pattern of smaller holdings – those of £100 or less – shows the opposite trend for both men and women. Women account for around 45 per cent of those with small investments in the first sample, but by the third, are roughly half that by number. Measured by capital, the decline is even more pronounced, with women providing just over 12 per cent of funds in the first sample, falling to just over 2.0 per cent by the third. Male retail investors, by the inter-war period, are 15 per cent of investors by number but account for less than 1.0 per cent of capital contributed. For institutions, in each of the three samples, more than 99 per cent of capital was held in blocks of £1,000 or larger while in none of the samples did the percentage of holdings of £100 or smaller come close to 1.0 per cent.

Table 6.3: Male Retail Investors: Holdings of £100 or less

	Retail men investors	Number of men holding £100 or less	% men holding £100 or less	Total men's retail capital £	Total capital of men with £100 or less £	% of capital held by all men with £100 or less
3½% war loan 1925-28	1,235	383	31.0	966,457	35,709	3.7
5% war loan 1929-47	1,125	241	21.4	1,423,383	17,330	1.2
Converted to 3½%	944	140	14.8	1,577,096	10,190	0.6

The picture is broadly the same when female retail investors' holdings are examined.

Table 6.4: Female Retail Investors: Holdings of £100 or less

	Retail women investors	Number of women holding £100 or less	% women holding £100 or less	Total women's retail capital £	Total capital of women with £100 or less £	% of capital held by all women with £100 or less
3½% war loan 1925-28	863	387	44.8	288,584	35,834	12.4
5% war loan 1929-47	795	207	26.0	451,599	15,589	3.5
Converted to 3½%	986	218	22.1	762,884	16,783	2.2

If the entire period had been one of raging inflation, that might explain the increase in large individual holdings. Instead, deflation prevailed. That means that the purchasing power of War Loan dividends was rising. It also meant that in real terms, the price tag for repaying war debt was rising.

How much wealth did War Loan investors hold?

How wealthy were those with large concentrations of War Loan? For all the broader evidence of somewhat narrowing of wealth and income inequality, War Loan was increasingly in the hands of the top 2.0 per cent, and ultimately, the top 1.0 per cent of the nation's wealthiest households. Using existing probate records which show how the different types of assets are held in estates passing at death, we can make some conclusions about the relative wealth of War Loan investors. There are three analyses of the proportion of estates held in UK government securities issued to finance war and each looks at estates within bands of similar sizes. The first, by E.V. Morgan, uses estates of individuals dying 1924–25 while the second, by Ursula Hicks, is culled from probate records of those dying in 1930.[488] The third table, compiled by Campion, looks at the composition of estates of persons dying in 1936.[489]

What is striking about all three tables, despite slight differences in the way the size of estates of wealthier individuals are grouped, is that in all of them, the percentage of assets invested in post-1914 government securities all account for a relatively narrow band well below a fifth of total assets passing at death. That means that on average, investors in War Loan typically had large holdings of other property. Using the mean average holding of War Loan across all the tables calculated by Hicks, Morgan and Campion, it is possible to construct a picture of how much other wealth an investor was likely to have. Knowing the average proportion of estates passing at death allows us to calculate, how big the entire estate is likely to be. For example, on average, War Loan investors holding £100 to £999 in War Loan in the third sample were likely to have an average estate at death of £2,940. Using Campion's tables, roughly 25 per cent of those dying with £100 or more in property in 1936 had total estates of that size. That equates to about 7.5 per cent of adults in 1936. But approximately two thirds of War Loan investors in the third sample would have had total estates of that amount. For investors whose War Loan holding in the

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[488] Morgan, *Studies in British Financial Policy,* Table 12, 133. Hicks, *The Finance of British Government*, 357.

[489] Campion, *Public and Private Property,* Table 11, 104.

third sample was £1,000 to £4,999, the average estate would have been £11,127 and 22 per cent of the sample were in that category. In contrast, a more modest 2.2 per cent of British adults aged 25 and over were in that category. For those holding War Loan in lots of £5,000 to £9,999 only 0.08 per cent of adults aged over 25 in Britain held property of equal value compared with 2.6 per cent of retail investors in the third sample.

Table 6.5: Proportion of Estate in War Loan at Death (1936)

Total estate at death 1936	Average % in Post-1914 war loan	Number of retail investors	% of retail investors	% of estates over £100	Average war loan holding by value of estate
£100-£999	12.3	1272	65.9	23.5-25.9	2,040
£1,000-£4,999	16.3	413	21.9	6.8-7.4	11,127
£5,000-£9,999	15.0	50	2.6	1.8-2.0	45,774
£10,000-£24,999	14.5	21	1.1	1.0	94,389
£25,000-£99,999	14.4	6	0.3	0.4	334,268
£100,000+	14.3	1	0.1	0,05	1,236,697

The conclusion is that as a group, War Loan investors were wealthier than other Britons, even when those whose assets at death were too small to attract duties are included in the calculations. The presence of outsize holdings among War Loan investors declines as the size of estates rises. However, that is because only retail investors are included in calculations for Table 6.5 (above). Of 40 institutions in the sample, 28 have holdings of £1,000 or more. Powell, Bacon & Howe Lines Ltd, a Liverpool-based shipping company, for example, held £100,000 in War Loan. Only one retail investor is likely to have an estate of £1 million or more; it was the mining engineer from Northumberland. Ledger records indicate that the invested sums were held in a trust and may have been able to limit estate duty charges at death.

The Tax Treatment of War Loan

As tax rates rose through wartime and after, the tax treatment of interest on War Loan securities became an increasingly contentious issue. Since the early nineteenth century, deduction of tax from interest and dividends on securities had been a staple of British finance. It was enshrined in Section 208 of the Finance Act of 1803.[490] But for the issue of the 5% War Loan 1929-47, launched in 1917, this core principle would be abandoned. By early 1916, as Britain was seeking to attract 'small' savings from the working and lower-middle classes, some principles of tax collection were gradually abandoned. For those saving via Post Office accounts smaller than £200 each, there would be no deduction of income tax from dividends paid, an effort to address concerns that savers would have to claw back tax that they were never required to pay in the first place.[491] However, by the end of 1915, as Treasury prepared to borrow or buy US-dollar denominated securities from investors (Chapter 2), it created its first open-ended issue of Exchequer bonds to be sold 'on tap'. Unlike the earlier War Loans, these had a five-year maturity but had no formal issue date. Investors would only receive accrued interest from the date of purchase making it impossible to determine how much tax to deduct when pay-outs were made. To attract overseas investors, the interest was exempt from taxation for those who could demonstrate they were foreign domiciled, and only liable to tax when it was declared as part of the investor's overall income.[492] In December 1916, as the newly-appointed Chancellor, Andrew Bonar Law, began consultations with the Committee of London Clearing Banks on terms of a new long-term War Loan, the bankers began to press for tax concessions to become part of the pricing. Indeed, minutes of a meeting in December 1916 showed the group was 'unanimously of the opinion that issue of a 4% tax free loan at par would not even ensure conversion of the existing 4½% War Loan' and would not attract any new money or even conversion of Treasury bills. The loan, the bankers argued, had to be tax-free and to return 4½% net.[493] Bonar Law did not like the idea of offering interest payable free of tax; it smacked of favouring the wealthy. Ultimately, the 1917 borrowing consisted of the 5% War Loan 1929–47 and a 4% 'tax-compounded' issue at par where dividends were exempt from income tax but not

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[490] B.E.V. Sabine, *A Short History of Taxation*, (London: Butterworths,1980) 118.

[491] TNA T 172/362, File: *Income Tax on War Loans and Exchequer Bonds*, 1916, letter, n.d., to 'Mr Williams', an investor, Signed, 'Yours Very Truly'

[492] Wormell, *The Management of the National Debt*, 193–4 .

[493] TNA T 1/12030, File: Minute. 'Arrangements for the issue of 5% War Loan Stock 1929–47 and 4% War Loan', memo, 29 December 1916.

supertax.[494] But for all the bankers' insistence on the need for implicit tax relief on the design of the new War Loan, the 'tax compounded' issue was largely ignored at the expense of the 5% War Loan. While the 5% War Loan 1929–47 raised £2,075 million, the tax-free 4% War Loan 1929–42 raised a mere £52 million. E.V. Morgan speculated that the lack of interest in the latter was 'an interesting indication of investors' optimism as to future rates of taxation'.[495] However, it is entirely possible that investors made a different interpretation: that is, that the tax treatment may have been a wink and a nod in the direction of tax evasion. Investors may have calculated that they might be able to pocket the higher annual dividend payment while evading detection by tax authorities.

Certainly, word that Bonar Law was even considering lifting the requirement to deduct tax before payment of interest to investors was alarming to the Inland Revenue. In a letter to the Treasury sent even before terms of the 5% War Loan were made public, E.E. Nott Bower, chairman of the Board at Inland Revenue in charge of superannuation[496]– in his second missive of the day – wrote that 'departure from taxation at the source will inevitably result in loss of revenue to which the Exchequer is entitled.' At the best, the planned tax relief would postpone the actual payment of tax 'just at the time when it is especially desirable for it to come in, and, as this phenomenon would continue, there would be throughout a loss to the country of the interest on the tax thus postponed.' Moreover, Nott Bower noted, investors are relied upon to self-report, and any number are likely to be insufficiently frightened of being caught. Interest on income earned in years where the owner has died or transferred the stock would be too easily overlooked and foreign owners, for whom payment of tax on income earned in Britain has long been required, would no longer be captured. [497] Nevertheless, for reasons outlined in Chapter 2 the generous tax treatment was incorporated into the new securities.

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[494] Wormell, *The Management of the National Debt,* 320–1.

[495] Morgan, *Studies in British Financial Policy,* 112.

[496] TNA, T1/12186/31621, Inland Revenue Department, Sir E.E. Nott Bower, chairman of the Board: superannuation, 1918.

[497] TNA T 172/741, File: *War Loan: Various Treasury memoranda etc*., Letter, to My dear Hamilton' (presumably George Alexander Hamilton, Financial Secretary to the Treasury), 1–3, 01 January 1917.

After the war, the Royal Commission on Income Tax 1919–1920 heard testimony from Sir Richard Hopkins, member of the Board of Inland Revenue and Joint Secretary of the Department, on the merits of deducting tax from payments at source. Sir Richard told the Commission that the practice lay at the heart of Britain's success in tax collection. 'Taxation at the source is the primary safeguard against evasion of duty because it deprives the taxpayer of opportunity to escape either by carelessness or by ignorance or by fraud, from payment of his due share of income tax.' He said that in the most recent financial year, some 70 per cent of income tax had been collected this way and in the fiscal year just ended, income tax had accounted for 58 per cent of the £499,259,000 collected. If the principle were abandoned, he testified, the change would be at least £50 million annually, a sum large enough to require current tax rates to be raised to *7s 3d* in the pound from the rate of *6*s then prevailing. Such a rise would likely attract outrage from most honest taxpayers, he said.[498]

Years later, the Colwyn Committee examined the effects that post-war borrowings and taxation had on the British economy. In its inquiry, the Committee looked closely at the effects that the abandonment of the long-held principle of deductibility of income tax at source was likely to have had on the terms offered on the 5% War Loan 1929–47 and concluded that on balance, the Exchequer was a net loser. Not that it had evidence of avoidance; rather, that the investor was not willing to accept a lower interest payment fully reflecting the value of delayed payment of tax. 'In these circumstances, it is hardly doubtful that the State does not in fact obtain in improved loan conditions anything approaching the real value of the tax concessions it gives', the Committee concluded.[499] Moreover, by at least 1924, evidence was emerging of systematic – and apparently successful – efforts to avoid tax altogether on War Loan. A cover letter to Montagu Norman, then Governor of the Bank of England from Sir Ernest Harvey of discount

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[498] TNA IR 85/1, *Royal Commission on Income Tax 1919–1920*, 1–5.

[499] Wormell, The Management of the National Debt, 714–5. Citing TNA, T 160/194/F7380/01/2, Niemeyer to Hopkins, 23 October 1925 *Report of the Committee on National Debt and Taxation*, Paragraph 172.

house Allen, Harvey & Ross, Lombard Street, is attached to a note describing a method for trading in Bank of England bills or in various war loans that allow a trader to escape the requirements to pay tax on interest. The note explains that the true beneficiaries are brokers in money markets, not individuals. Sir Ernest cites a recent lunch with two officials of Somerset House (home then to the Inland Revenue) who say that they do not object to the practice, but Mr Harvey compares the practice to the receipt of stolen property. The trade requires the transfer of stock in certificated form to that of bearer form which does not identify the ultimate owner, and then the reversion after the transaction.[500] Thus, there is no paper trail of a dividend payment which tax authorities could use to demand payment. The Bank was apparently sufficiently concerned that it retained a law firm to advise it on the topic. The Bank wrote to the Chairman of the London Stock Exchange's Committee for General Purposes, asking whether it would stop the practice of selling stock just before the dividend payment date that appears designed to avoid payment of tax on interest.[501] That the practice was becoming widespread was apparent; in a note to Montagu Norman, the Bank's chief accountant reported that he had seen Sir John Mullens and a delegation from the Stock Exchange Committee. While those present agreed that such operations went on, all insisted that their organizations did not participate. The chief accountant added that he had also seen Sir Richard Hopkins at Inland Revenue who was 'quite alive to the possibility of evasion of tax.'[502]

But by the late 1920s evidence was emerging that financial institutions were aiding in the systematic avoidance of tax through a mechanism involving the sale of a security just before the payment of its dividend and the repurchase immediately after. Both the sale

[500] BoEA, AC13/250, File: *Accountant's Department File on Tax Evasion and Verification of Stock Holding by Inland Revenue*, letter to Norman Montagu from Sir Ernest Harvey, 02 April 1924.

[501] BoEA, AC13/250 File*: Accountant's Department File on Tax Evasion and Verification of Stock Holding by Inland Revenue*, letter, to: Chairman, Committee for General Purposes, London Stock Exchange, from Mullens Marshall, Steer, Lawford & Co, Mansion House, 09 April 1924.

[502] BoEA, AC13/250, File*: Accountant's Department File on Tax Evasion and Verification of Stockholdings by Inland Revenue,* Memo, to Governor, from Chief Accountant's Office, Bank of England, 11 April 1924.

price and the repurchase price allowed the investor to recoup most of the tax he would have had to pay, while sharing some of the benefit with the financial institution. Moreover, the practice appeared to be so widespread and so well known that various government ministers had considered the matter and declared it laful. Indeed, in his Budget speech of March 1927, the then Chancellor, Winston Churchill, 'hinted plainly enough' holders of a significant portion of War Loan stock were evading taxation and vowed to stamp that practice out.[503] That did not happen. Three years later, the mechanics of the process are outlined in a letter to E.F. Wise, MP and economist. It involves the sale of War Loan to an insurance company on the date the dividend is to be paid at a price reflecting the fact that the buyer will earn the interest. Because the buyer is a life insurer, it will not pay tax on the dividend earned. If the seller is a broker, it will only pay tax on all its profits, not on the capital gain on the sale of the security. The letter goes on to explain how a swap of £10,000,000 could help an investor whittle down a £100,000 tax bill to one of £7,500. 'Lord Sumner, Mr Churchill and Sir Douglas Hogg have each said that a transaction is legal provided it is not an evasion of taxes. One thing, however, is clear: the Revenue does not receive the taxation that was intended, and that means that the shortage must be met by additional taxation in other directions.'[504] Although the letter to Wise does not bear a signature, it appears to be part of correspondence with Frederick William Pethwick-Lawrence, a Labour MP and, at the time, financial secretary to the Treasury.[505] Wise wrote to him in February 1930 after having received correspondence from Sir James Leigh-Wood, Chairman of Brown, Shipley & Co, a merchant bank and a board member at several companies. 'Sir James tells me that practice to which he draws attention goes on every half-year to a very big extent. He believes that the transactions may cover tens of millions of pounds.' The letter adds that the practice has been

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[503] No Author, "Income Tax on War Loan Interest", *The Economist*, 23 April 1927.

[504] TNA, IR 40/3753, File: *Tax evasion on war loan bonds*, letter to E.F. Wise, Somerset House, 21 January 1930, 1–2.

[505] Encyclopedia Britannica, Frederick William Pethwick-Lawrence, Baron Pethwick-Lawrence, https://www.britannica.com/biography/Frederick-William-Pethick-Lawrence-Baron-Pethick-Lawrence-of-Peaslake. (accessed 24 June 2019).

subjected to scrutiny by legal experts and is deemed to be perfectly legal, but there are concerns that it is 'contrary to the whole spirit of the law.'[506]

An undated memo sets out in detail the mechanics of the tax avoidance scheme. 'The villain of the piece is the person who purchases cum dividend and sells back ex-dividend,' it notes. 'He must be a finance house, jobber or other person who carries on a business which comprises the purchase and sale of securities liable to assessment under D case 1 of Schedule D upon his profits including the results of such dealings.' The accomplice would be a genuine holder of British government securities. 'The victim is of course the Revenue, and the plunder, shared between the villain and the accomplice, is the amount of the tax on the dividend.' The memo goes on to give an example of a transaction which occurred in 1927 in which Revenue sought to claw back some of the tax it believed it was owed. It also refers to efforts in respect of a shipping company with over £7,000,000 in government securities. The accounts for the company for 1926 show that in addition to £150,000 from income on these securities, there is a further £175,000 representing profits gained by selling securities cum-dividend and buying them back ex-dividend. 'The company's purchases of investments were frequent enough to support a contention that in addition to their shipping business, they carried on the business of dealing in securities,' the memo states, noting that Revenue is also seeking to reclaim unpaid tax. 'It is clear that the Company evaded tax annually to the extent of £40,000 or £50,000, by transferring the dividend coupon to finance houses,' the memo concludes, noting that the company says it has ceased the practice because it wishes to avoid assisting foreigners to make profits at the expense of the Inland Revenue.[507]

Inland Revenue appear to have responded to Mr Wise's enquiry by noting that measures to check systematic avoidance of supertax had been made via Section 33 of the Finance

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[506] TNA, IR40/3753 File: *Tax evasion on war loan bonds,* Letter, To: Pethwick-Lawrence, From: E.F. Wise, 14 February 1930, 1–2.

[507] TNA, IR40/3753 File: *Tax evasion on war loan bonds,* Memo, 'Division of Tax on Dividends of Fixed Government Securities, n.d., cover letter, 4 February 1929, 1–9.

Act 1927, but that it would be 'happy' to receive any new information on the topic.[508] Indeed, the practice had become so common that an article appeared in *Bankers' Magazine* in August 1928, referring to an article in that same magazine a year earlier as speculation about Treasury's inability to repay the 5% War Loan at maturity in 1929 began to swell. It suggested promising investors that the 5% War Loan would not be redeemed in 1929 provided they surrendered their right to receive dividends pre-tax deduction. The article hinted at widespread avoidance of tax on interest of war loan and suggested that it might be in government's interest to offer to extend the 5% interest payment for a further five years beyond its 1929 maturity date.[509] For its part, the Inland Revenue was dismissive of the suggestion that widespread tax evasion went on. One official wrote in response that many investors were, in the first place, exempt from tax by virtue of assets held in trusts or by persons overseas. Moreover, efforts had been made to capture tax lost through non-reporting by investors, Inland Revenue officials said. Among other measures, it periodically received extracts from Bank of England registers revealing investors holding lots of £500 or more which were passed to local inspectors. It added that it did not believe tax evasion deprived Inland Revenue of more than £500,000 per year.[510]

Nevertheless, the evidence from the ledger samples points to a growing concentration of large volumes of capital in the hands of progressively fewer – and probably wealthier – investors. This suggests that the incentives to avoid tax were rising and moreover, that the machinery to do so was available. It was available to investors wealthy enough to have relationships with finance houses, insurers and merchant banks, many of which appeared to be more than willing participants in the exercise. Quantifying tax evasion at the time would be impossible. Nevertheless, to the extent that tax revenues were a form of income

[508] TNA, IR40/3753, Letter, To: Mr Glen, From J.F.H, 18 February 1930.
[509] TNA, T 60/429/7, File: FINANCE: *Loans Government Stock War Loan 1929–47 5% War Loan*, suggestions regarding Redemption; question of non-deduction at source, 2 April 1928 – 20 January 1932.
[510] TNA T 160/4297/7, File FINANCE: *Loans Government Stock War Loan 1929–47 5% War Loan, suggestions regarding Redemption; question of non-deduction at source*, Letter, to Ismay, From: Inland Revenue Stationery, 15 October 1928.

re-distribution, the ability to easily evade tax on interest paid on War Loan – all of which came from taxation- may equally have gone from the working and middle classes to the wealthiest members of society. Thus, in its last years, the 5% War Loan 1929–47 became a vehicle for income re-distribution. But it went the wrong way.

Reducing the Burden: Conversion to a 3½% War Perpetual

The 5% War Loan 1929–47 took on a significance all its own partly because of its sheer size, partly because of the burden the interest payments laid on the Exchequer and partly because it came to symbolize the role of the *rentier* in post-war Britain. Returns to the idle rich were rising in real terms thanks to deflation, while the need to provide unemployment insurance for a growing number of unneeded workers created a demand on the Exchequer that could only be met through higher taxation. A Labour government came to power in 1929 and almost immediately faced the fallout of the crisis on Wall Street. The rate of deflation snowballed, delivering even higher real returns to holders of War Loan and raising the cost of debt service in real terms. Inflation in Britain had peaked in April 1920 at an index level of 325 against a 1913 level of 100. By December 1922, it had fallen to 155.8, achieving relative stability of 166.2 in 1924. But plans to return to gold, announced in 1925 and the subsequent moves in interest rates, pushed prices down to an index level of 140 in 1929 and to 99.2 in September 1931 as Britain abandoned the metal.[511] Forrest Capie and others, using an index of prices, calculated these fell by roughly 12 percentage points between 1925 and 1932.[512] The price of the 5% War Loan in the years 1928 to 1932 reflected its rising value in real terms.[513]

Because of its size and symbolism, this War Loan hung over the heads of government ministers and became a focal point of political ire. Thus, when Britain abandoned gold in 1931, the subsequent fall in interest rates appeared to offer an opening to what had been completely impossible before: refinancing the entire loan. At the end of the 1931–32

[511] Josiah Stamp, *The Financial Aftermath of War*, (London: Ernest Benn Ltd, 1932), 79.

[512] Capie et al. 'Was the War Loan conversion a Success*?*, 3.

[513] Ellison and Scott, 'Managing the UK National Debt'

fiscal year in March, the outstanding balance of the 5% War Loan was £2,085 million. It totalled just under a third of all internal (domestically borrowed) debt, and equalled 28.2 per cent of all debt. Debt service on the loan in the 1931–32 fiscal year was £104.3 million, equal to just under 14 per cent of the £767 million that the then Chancellor Neville Chamberlain was to forecast when presenting his budget for the 1932–33 fiscal year. Wormell points out that although the coupon was considered high at the time, it was not anomalous; there were two other gilt-edged stocks trading with similar coupons at the time. Compared with other dated issues in the market generally, the coupon was not particularly out of line; the lowest rate on any outstanding was 4%.[514]

Nevertheless, it was the single largest War Loan outstanding and the entire post war period until mid-1932 consisted of a series of efforts to the delay the day of reckoning when very large repayments of principal would have to be made to investors. The conversions offered earlier in the decade failed to persuade a significant percentage of investors to agree to delay the date at which repayment would have to be made. 'Although the Treasury chipped pieces off the Loan between 1917 and 1932, it failed to reduce its size,' Wormell reported.[515] Indeed, some of the conversion offers made immediately after the war smacked of the desperation that Treasury officials were likely to have felt in their hopes of warding off the need to quickly repay principal. According to a private account of the Bank of England's role in raising war finance, 'The Bank considered that the need for funding was so paramount that no opportunity of doing so should be lost and the mere fact of funding was more important than the interest charge,' Osborne notes. Indeed, the 1921 conversion offer - the one earlier described by E.V. Morgan as the 'nadir' of government borrowing 'was thought by many to be too generous' and even then, additional tax privileges were added to it.[516]

[514] Wormell, *Management of the National Debt,* 590.

[515] Wormell, *Management of the National Debt*, 593.

[516] BoEA, M7/156, J. Osborne, *Bank of England: 1914–1921 (Unpublished History*) Vol 1, Chapter 3, 461.

Therefore, it is understandable that as the maturity date approached, various schemes were tossed about that might allow the Treasury to avoid having to either repay £2,100 million in principal or to avoid paying the odious 5% annual coupon. The face value of the 5% War Loan 1929-47 equalled 45 per cent of Britain's GDP in the year that it first became redeemable.[517]As early as November 1925, the Treasury and the Bank were looking at various mechanisms to avoid repayment of the £2,100 million in 5% War Loan. A memo from the Treasury to the Bank sets out options that include a conversion to a 2½% security with a 100-year maturity including a penal tax on those who did not convert, a series of smaller, but rapid conversions and a conversion to a 3½% security with tax penalties for those who did not take it up.[518] But in a memo analysing those options, the Treasury rejected them, noting, among other objections, that the long-term replacements resembled annuities which had been unpopular in the nineteenth century, that the replacement securities would leave 'an unjustifiable burden on posterity', that the conversion would represent 'a large and violent change in the return on Government stocks' casting doubts about the integrity of government generally and being likely to attract bitter objections from various classes of *rentiers*.[519]

Indeed, by 1927, the Treasury had begun to receive imaginative schemes from those outside government to reduce the outstanding balance of the 5% War Loan. One of these, from J. Hanson Lawson, a stockbroker and partner at the firm Pember & Boyle, described the City's view of the loan, in a communication to the Chancellor marked 'Secret & Confidential' in April 1927. The view among financiers, he wrote, was that 'it is highly improbable, almost inconceivable, that the Treasury could, with prudence, in 1929 or

[517] Mitchell James, Solomos Solomu, and Martin Weale, 'Monthly GDP estimates for inter-war Britain', *Explorations in Economic History*, 49 (2012) 543-556. GDP is calculated by adding the four quarterly calculations for 1929 based on 1938 prices as seen in Table 2a.

[518] BoEA, C40/427 *File: Chief Cashiers Private File No. 259, Conversion of War Loan)5% into 3 ½%) 1925–1960*, Handwritten cover note to 'Mr Governor' from O, Neimayer, Treasury Chambers, marked 'Secret', 11 November 1925, typewritten note attached.

[519] BoEA, C40/427 *File: Chief Cashiers Private File No. 259, Conversion of War Loan)5% into 3 ½%) 1925–1960*, Memo, n.d., not signed, 1–14.

indeed at any time, embark upon an operation involving the compulsory redemption, by notice of some 2 ½ millards (sic) of stock.' He noted that the only way Treasury could induce investors to voluntarily convert their stock would require terms that are even worse for the nation's finances than terms then prevailing. The solution, he suggested, would be to offer holders of the loan a reduction of 6d in their income tax rate conditional upon their agreement to convert existing holdings to a new security. 'The larger the reduction in taxation offered, of course, the greater the incentive to convert,' he wrote. The biggest holders of the War Loan – bankers, insurance and Trust companies – should be personally told that conversion is in the national interest to encourage smaller holders to convert, too. Mr Hanson-Lawson predicted 'a stampede' out of War Loan if the plan were adopted.[520]

By early 1928, Treasury published more proposals aimed at avoiding the need to refinance War Loan which had been submitted. Significantly, these implied that the ability to receive dividends on War Loan without deduction of income tax was being widely exploited by those likely to incur the highest tax rates. Two of these implicitly acknowledged the simultaneous need to cut the debt service paid out every year; they suggested that the maturity be extended on condition that the exemption from collection of income tax at source be ended. Although this would not have cut annual interest payments, each of these were subtle acknowledgements of the fact that large revenue streams were being lost to the Exchequer through tax evasion. The net effect would have given the Exchequer more revenue even without a coupon cut.[521]

By late 1928, Treasury sought a legal opinion on whether it could unilaterally cut the 5% coupon, a move taken on several occasions during the nineteenth century in respect of

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[520] BoEA, C40/427 *File: Chief Cashiers Private File No. 259, Conversion of War Loan)5% into 3 ½%, 1925–1960*, Letter, John Hanson Lawson, 11 April 1927, 1–9.

[521] TNA, T 160/429/7, File *FINANCE: Loans Government Stock War Loan 1929–47 5% War Loan, suggestions regarding Redemption; question of non-deduction at source,* Table, n.d., list of dates suggested conversions submitted, name of proposer. Handwritten note: 'Keep always in front of the current part of F.12276/01

Consolidated Annuities. However, in the opinion of the Crown Law Offices, the short answer was that the move was legally impossible. The Law Offices suggested that some sort of staggered repayment scheme might be possible, but such a move was likely to require legislation.[522]

By early 1931 as banking and financial conditions worsened, the need to cut the outlay spent on debt service weighed on government. A handwritten note outlining the outstanding war-related financings included that of the 5% War Loan. Its author concluded: 'Conditions are not too brilliant for this.' It pointed out that as of 2 February 1931, that loan was trading at 103.88.[523] That price implied a Gross Redemption Yield (GRY) of 4.66%, meaning investor demand was so strong, that even a sub-5% yield was acceptable.[524] As international crises mounted through 1931, the need to refinance War Loan intensified and a variety of schemes were considered. The breakthrough came from radical Liberal MP Richard Douglas Denman, who set out what became the novel approach that was likely to allow the maximum conversion to a lower rate. It sought to steer a path between the compulsory measure of forcing investors to accept a lower interest rate on a new security – a move which might trigger demands for full repayment of all £2,100 million face value of 5% War Loan – and doing nothing. The suggestion was that the conversion take advantage of investor inertia and issue an offer to convert to a new security whereby those who did not formally object would be deemed to have accepted. 'I don't know whether your advisers think they can estimate the percentage of success in the novel venture of a wholly voluntary conversion of £2,000,000,000. My

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[522] BoEA, G1/466 File: *Miscellaneous File*, Memo: Opinion of the Offices of the Crown, T.W.H. Inskip, F.B. Merriman, Law Offices Dept., 13 December 1928, Note, From R.V, Hopkins 12 January 1929, 'As promised, I send a copy of the case for the Law Offices on the 5% War Loan of this opinion. Reply, n.d. 'This will likely be needed when the 5% War Loan comes to be considered; so it should be kept without burial'.

[523] BoEA, C40/427 *File: Chief Cashiers Private File No. 259, Conversion of War Loan)5% into 3 ½%) 1925-1960*, hand-written note, nd, no signature, around February 1931.

[524] As calculated here: http://www.candidmoney.com/calculators/investment-redemption-yield-calculator (accessed 17 September 2019).

own experience of investors' mentality would make me most afraid of the vis inertia, of the laziness of trustees or private investors in coming to any positive decision,' Denman wrote to Lord Snowden. Faced with a complicated decision to make, many investors were likely to do nothing. 'I am confident that the average City man would approve a degree of compulsion which destroyed no rights and merely introduced an element of order into the process of conversion. Indeed, so widespread is the feeling that the War-loan has to go that I believe before a procedure which would enormously lessen the Labour of persuasion would be exceedingly popular. I assume, of course, that whatever oil would be given to stock-brokers and bankers who helped to carry through a voluntary conversion would equally be given in this proposed case!' The letter added that unless the offer appeared wildly unfavourable, 'they would tend to let a conversion proposal lie on their table and they would slide into surrendering for cash on the appointed day.'[525]

The Treasury began drafting legislation that would make conversion of the War Loan possible in 1931. Frederick Phillips, secretary to the Treasury, set out the uncertainty surrounding investors about the likelihood of conversion. In a handwritten memo, he wrote 'If it were clear to everybody that the Gov't could repay the loan in all at once, the market price would be 100; if it were clear to everybody that the Gov't could not repay the loan before 1947 it would stand at about 107 under present conditions,' adding that the then market price was 103. That price implies a GRY of 4.39 per cent in 1947.[526] Government thinking about how a conversion should proceed is set out in a hand written memo in 1931 hinting at a replacement loan later that year and specifying that only submission of a clear expression of dissent would be regarded as objecting to new

[525] TNA T 160/449, File: *Treasury: Papers concerning the Conversion of the 1917 5% War Loan*. Letter to Lord Snowden, From R.D.Denman, 01 May 1931, 1–3.

[526] GRY calculator: http://www.candidmoney.com/calculators/investment-redemption-yield-calculator (accessed 17 September 2019).

terms.[527] In September 1932, Section II (2) of the September 1931 Finance Act was passed, permitting failure to respond to a conversion offer to be deemed an acceptance.[528]

Ultimately, the scheme to convert the burdensome 5% War Loan 1929–47 would rely heavily on investor inertia, but with its path eased by a global economic depression in which few prospects for investment were likely. The immediate trigger for Britain's departure from the gold standard was the run on Danat Bank in 1931, which exacerbated the weakness in Britain's foreign reserves that fed its external account and supported sterling under the gold standard. All components of Britain's invisible reserves weakened between 1930 and 1931 and foreign central banks gave little sign of enthusiasm to lend to the Bank of England. It was the reluctance of the Labour government to slash unemployment benefits in particular – unemployment was over 20 per cent by summer 1931 – that raised concern about further lending. In August 1931, the Labour government fell and was replaced by a National Government. But gold convertibility was suspended on 19 September 1931 and, despite a new government following elections in October 1931, the gold standard had been abandoned.[529] But although interest rates should have been falling due to economic depression, it was not until 18 February 1932 that the Bank Rate was cut to 5.0 per cent from 6.0 per cent where it had been hiked in September 1931 to stave off the outflow of gold. Ultimately it would be cut to 2.0 per cent shortly before announcement of the conversion of the 5% War Loan.[530]

Settlement of Britain's debt overhang was regarded as necessary to smooth the path to some form of economic and fiscal stability. By 6 June 1932, the Governor of the Bank of England was able to tell Treasury that the contemplated conversion should go ahead with a coupon on the new stock to be set at 3½% and a maturity date that would not be before

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[527] TNA T 160/449/3 T212-1, File*: Treasury Papers Concerning Conversion of the 1917 5% War Loan*, n.d., hand written memo, 1931, no signature 1–9

[528] Wormell, *Management of the National Debt of the United Kingdom,* 614.

[529] Barry Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression 1919–1939*, (New York, NY, Oxford University Press, 1995), 275–285

[530] Wormell, *Management of the National Debt,* 606 – 616.

1 December 1952. Thereafter, it could be called at three months' notice. Announcement of the conversion was made to Parliament on an unusual Saturday opening on the London Stock Exchange, just days after Bank rate had been cut to 2.0 per cent. Investors agreeing to the conversion before 31 July would receive an additional bonus of 1.0 per cent of converted holdings. Moreover the 'oil' that Denman's 1931 letter had suggested being spread around to intermediaries to facilitate conversion was set at a commission of 5.0 per cent, payable to not only brokers and banks, but also to solicitors and Scottish law agents.[531] Richard Sayers, the economist and historian, wrote that with hindsight, Britain's government viewed the conversion exercise in 1932 as 'altogether exceptional', directed as much by its desire to push prevailing interest rates down as it was to save government expenditure on debt service.[532]

In his appeal to investors to take up conversion of stock, the then Chancellor Neville Chamberlain, leaned heavily on patriotism. Unveiling the conversion offer in Parliament, he set out the expected benefits including lower interest rates that made credit cheaper for industry. It would also save the Exchequer £30 million annually in debt service payments, equal to £23 million net of tax. 'For the response we must trust, and I am certain we shall not trust in vain, to the good sense and patriotism of the three million holders to whom we shall appeal,' the Chancellor told Parliament.[533]. Indeed, in making his appeal to investors large and small, the Chancellor invoked the war spirit and patriotic fervour to encourage conversion to what was clearly a less attractive security. A leaflet aimed at those with Post Office accounts urged investors to 'show the world the unshakeable determination of this great nation to fight its way through its troubles and thereby to encourage and inspire others to emulate its example.'[534] The response to the

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[531] TNA 160/449 Treasury: *Papers concerning the Conversion of the 1917 5% War Loan*, Letter to Lord Snowden, from R.D. Denman, 1 May 1931, 1–3.

[532] Richard Sayers, *Financial Policy 1939–1945*, (London: HMSO, 1956). 150.

[533] TNA, File T 160/449 *: Treasury Papers Concerning Conversion of the 1917 5% War Loan*, Speech, Neville Chamberlain, 2 June 1932, 1–3

[534] BoEA AC19/775, File: *British Government 3 ½% War Stock (formerly 5% War Stock 1929/47) Stock Jacket*, printed leaflet ' Leaflet W.L. 'The Holders of 5% War Loan 1929–1947 (Post Office Issue).

conversion offer was overwhelmingly positive. Out of 1,322,727 separate accounts totalling £1,872 million in 5% War Loan 1929–47 as at 6 January, 1932, just over 89 per cent was converted to the new 3½% Converted War Loan. When investors at the Bank of Ireland in Belfast and Dublin are added, along with those whose accounts are at Post Office banks, the percentage converted rises to over 90 per cent.[535]

When the results for the sample covering the years 1919–32 are compared with the final breakdown prepared by the Bank of England, the totals differ: this is because the sample covers those who purchased, converted, or transferred in stock from another portfolio between 1919 and December 1932. The Bank data covers existing accounts as at 1 December 1932 only. Of the sample, 873 investors out of 1,970 in total transferred or converted all or part of their holdings before 1932. Of the remainder, 806 assented on all or part of their holding. A total of 67 investors redeemed their holding for cash. The median holding of those who assented was £400 each, roughly in line with the wider sample. Of those who chose to redeem, the median was £300. The single largest investor, a family of mining engineers with over £207,000, sold nearly half of their holding down by January 1932 when it was converted into 5% Conversion Stock. However, the Bank of England's internal analysis suggests that one trend picked up in the sample – the trend toward larger concentrations of capital in fewer hands – continued as the economic depression deepened. The Bank calculated that the mean average size of stakes held in Book Stock form – the form that favours financial institutions in and around the nation's capital – was £1,504 – split among 604,536 investors as at 1932. The mean average Deed Stock holding was £939 – the form favoured by those who typically used the provincial stock exchanges – split among 718,191 accounts.[536]

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[535] BoEA, AC19/779 (C Part) File*: 3 ½% War Stock, Stock Jacket,* hand written note, 'Figures obtained for statistics of stocks', 6 January 1933.

[536] BoEA, AC19/779 (C Part), File*: 3 ½% War Stock, Stock Jacket*, hand-written note, 5% War Stock continued as 3 ½% War Stock; Figures as at 1st December 1932.

A list of investors holding £1,000,000 or more as at 30 June 1932 shows the single largest investor to be the Post Office with just under £95 million and two separate accounts at the Bank of England holding just under £18 million between them. Most of the other accounts ranging from £25.1 million to £3.3 million are held by banks, trusts, charitable accounts or insurance companies. However, Shell Transport & Trading has a £3.3 million stake and two sets of private individuals have £25.2 million and £20.0 million respectively, while three other sets of individuals have smaller accounts of £1.1 to £1.3 million each. The analysis of War Loan holdings includes a breakdown by industry showing banks collectively holding £190.1 million, just under 10 per cent of the entire issues with insurance companies invested in £29.0 million. British Government Departments and towns and public bodies were significant owners of War Loan, with just under £30.0 million between them. However, the final tally adds support for the argument that industries that gained from war-related demand were able to convert that capital into low-risk, high-yield War Loan. General industrial companies held £5.9 million, shipping companies a further £2.6 million, collieries and coal exporters held £1.9 million while oil companies owned £2.8 million.[537]

That so many people should have voluntarily agreed to a 30 per cent cut in their income on a single security and a delay of possibly decades in the date of principal repayment is a counter-intuitive result. Capie et al., in the comprehensive look at the conversion exercise, asked first, why shareholders accepted the new shares even though these clearly offered less attractive terms than those prevailing already and second, why advisers such as stockbrokers might have urged their clients to convert. These questions are asked in the context of a narrower, but more fundamental question that raged at the time: did the existence of such a large volume of stock bearing interest at a rate so out of line with economic conditions artificially prop up interest rates on every other form of borrowing? Their conclusion to the last question was that the effects of the conversion on other interest rates were very modest. One contemporary view was that the appeals to

[537] BoEA, AC19/775, File: *British Government 3 ½% War Stock (formerly 5% War Stock 1929/47) Stock Jacket*, various memoranda, n.d.

patriotism had been effective, although the research cites at least one researcher pointing out that the offer was a good deal for investors. Britain's economy had been in depression since 1929 and investors were smart to pile into gilts in anticipation that falling interest rates would deliver capital gains on securities. Another view is that the Bank of England expansion of the money supply at the time of the conversion offer facilitated the large number of acceptances. But other research suggests that factors outside the control of the authorities were at work; the economy had been in depression since 1929, and after the fall of the Labour government in 1931, there was greater confidence in that which replaced it. A massive publicity campaign may have helped persuade investors to convert their holdings, while the drive to encourage large institutions to similarly convert may have weighed on the minds of the public. Moreover, investors had seen the downward trend in interest rates since 1930 and there was little reason to expect yields would rise again quickly. Because interest rates and bond prices move in inverse relationship to each other, the fact that rates would stay low meant that War Loan would continue to trade at par value or above. In other words, investors may have accepted a lower income in exchange for an implicit guarantee that their capital gains would hold. Another reason may have been that investor confidence in corporate listed securities had been badly shaken by the Hatry scandal in 1928.[538] Clarence Hatry, who according to a New York Times account had previously been recognized as a 'reckless company promoter' had sold investors what was described as 'forged paper'. In the London Stock Exchange boom of 1928, investors were prepared to overlook his shady past and bought the securities with abandon. The affair may have made investors chary of private sector securities for years after. And after three years of sluggish demand for new securities to buy and sell, intermediaries such as brokers were incentivized to encourage conversions through the generous commissions they were offered.[539]

Conclusion: The War After

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[538] Forrest Capie, Terence Mills, Michael Thomas, Geoffrey Wood, *Was the War Loan Conversion a Success?*, (London, Centre for Banking & International Finance, The City University, 1983), 2–13

[539] No Author, The Hatry Case, *The New York Times*, 25 January 1930, 8.

With the external threat of war removed from consideration, the years following the 1918 armistice were a bitter battle over how the costs – and any benefits of the heroic national sacrifice – should be shared. While the middle and upper classes hoped for a restoration of the pre-war tax rates, the working classes sought – and indeed, expected – what Bernard Waites describes as 'class abatement'. That is, it was not just that they wanted improved working conditions and higher pay, they wanted a safety net to shield them against the worst outcomes of unemployment, ill health and old age. Moreover, they wanted paths to upward social mobility in the form of better housing and schools. Nevertheless, the period was characterized by fierce opposition to what was perceived as growing political muscle of the working classes and a great desire of the middle classes to maintain their status and identity in a rapidly changing world that no longer had Britain at the centre of global trade. The economic and financial challenges facing the nation were vastly different than those of pre-war years. And the decline of the 'old' export-oriented industries of coal, iron and steel, shipbuilding and cotton and textiles, all of which had done so well out of war, led to mass unemployment in the north east, north west, Scotland and parts of Wales where those industries were based. From 1925 onwards, unemployment did not fall below 10 per cent for the remainder of the period covered by the sample.

But for all the apparent ascension of the occupations of the lower middle classes into the ranks of investors in tradeable securities, it is the concentration of capital in the hands of progressively fewer investors overall that is most striking as the post-war period progresses. By the third sample, nearly 87 per cent of all capital invested on behalf of male retail investors was held in accounts of £1,000 or more, up from 74.8 per cent in the first sample, a time when wealth and income inequality were at their peak. For female retail investors, the numbers are more modest, albeit following a similar path; roughly two-thirds of these were in accounts of £1,000 or more, up from 34.4 per cent in the first sample.

The changes in Britain's economy and society brought about by war appear to have widened the pool of those able to become investors. Overall, the trends coming from the ledger samples suggest a broadening and deepening of the middle and professional classes as owners of securities. But the concentration of wealth appears to have been used to invest in the safest securities, 5% War Loan, not only an investment that rose in real terms as the period went on but one that appeared to offer the opportunity to avoid a growing tax burden that the remainder of Britons had to shoulder.

During the interwar years, successive British governments sought to resolve class tensions by combining introduction of a limited safety net with changes in taxation that sought to ease the burden on families, but which continued to tax wealth passing at death through estate duties. While abandoning demands for the overhang of war debt to be paid for by wealth, Britain found a compromise. It is one which resonates today as the nation agonises over how to pay for an increasingly ageing society with a dwindling proportion of those of working age. In debating whether to tax income or wealth, Britain compromised by more modestly taxing the income of the living but levying harsher taxation on the wealth of the dead.

CHAPTER 7
Conclusion

The purpose of this research is to determine the sources of the private financial capital that underwrote the war fought by Britain and its Allies against the Central Powers in the First World War. The sources of capital mattered because ultimately, the outcome of the First World War was dependent upon it. The First World War was a war of attrition in which simply outlasting the other side could be described as victory. As late as spring 1918, this ‘victory’ for the Allies was far from assured; Germany had won in the east, forcing Russia into a humiliating and confiscatory defeat at Brest-Litovsk. Meanwhile, German forces were driving French and British troops back towards the English Channel.

Outlasting the other side meant being able to feed and equip armies and to move military and domestic goods across vast distances. It meant putting logistics in place not only to service the military but also to feed, clothe and satisfy civilians at home, ensuring continued domestic political support for war. This required capital. Britain financed war through a combination of increased taxation and borrowing, but it relied far more heavily on borrowing than it had in earlier wars. By the end of the war, Britain had borrowed £7,280 million, of which four-fifths was raised at home. Where did all this capital come from? How did Britain persuade or otherwise coerce its citizenry to loan their own stocks of private financial capital to it for the purpose of war? What inducements did it offer? Were there punitive measures for those who did not loan their funds? How did it do this in a nominally participatory democracy without threatening the legitimacy of the state? The short answer to the question is that Britain had private financial wealth available to be tapped. Not only that, unlike nearly any other combatant during the First World War, the national output in Britain grew steadily throughout the years 1914–18, while those of both its allies and its enemies contracted. Even in wartime, then, new wealth was being created in Britain. Only the United States experienced a roughly equal rate of wartime growth.[540] This research brings to light for the first time what is perhaps an even more important point: that is, that at the outbreak of war in 1914, Britain was unique among the combatants in having in place the institutional architecture enabling it to raise funds for war. These included a governance structure embracing a range of political interests, legal protection for property rights, an organized system for collection of tax revenues and a secondary market for government debt. Ultimately, this research concludes that Britain would have to call upon all its institutions, formal and informal – from agencies of government to schools, churches and employers – to marshal the capital for war.

But as this research has showed, even with this architecture and the store of domestic private financial wealth, Britain had to compete hard to marshal capital for the purpose of war. The 'Battle for Capital' occurred on three different fronts; first, ensuring that Germany and its allies had the most limited access to it. Second, Britain had to ensure that the purchasing power of its own capital did not fall relative to other currencies, especially that of the US dollar. And third, it had to entice the private financial capital from the pockets of those who had it. While this last exercise was initially only aimed at the wealthiest at the top of the income ladder, it was later extended to the workers at the economic 'coalface' who were extracting the material that kept arms and manpower moving on the warfront.

Overall, no single method of attracting capital proved successful on its own. Much of the existing literature on how finance was raised during the First World War emphasizes its patriotic appeal and efforts to attract the savings of workers who were enjoying higher wages as a result of government intervention to avert labour shortages. But this research shows that only by aiming both the sales pitch and the design of investment at the wealthiest, could Britain attract enough capital to finance itself through long-term,

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[540] Broadberry and Harrison, *The Economics of World War I*. 12. In 1918, Britain's GDP stood roughly 15 per cent above its in level in 1913 while that of the US stood roughly 13 per cent above its 1913 level. Germany's GDP in 1918 was roughly 82 per cent of what it had been in 1913, that of France was 64 per cent of what it had been in 1913, while that of Austria was 73 per cent of its 1913 level.

industrialized warfare. The role of finance in the First World War has not been completely overlooked in existing literature; David Stevenson, in his analysis, describes at length the measures the United States undertook to raise funds after declaring war on Germany in April 1917 and notes that the fund raising efforts resembled those used in Europe. Significantly, Stevenson concludes, much of the capital was raised, as in Britain, from wealthy individuals and businesses.[541] But the fact remains that the war had been ongoing for nearly three years before the US government loaned any money to the Allies and it was Britain which shouldered the finance burden almost alone until then. Moreover, Britain continued to raise funds from its own citizens even after American capital became available (Chapter 2). Similarly, Adrian Gregory examined the effectiveness of public fund-raisings through so-called Tank Days (Chapter 2) and through various War Savings committees aimed at the cash of those much further down the income ladder. These were the fund-raising activities aimed at the savings of the lower middle and working classes. Based on records, Gregory concludes that some of the wealthiest parts of Britain, including the counties of London and Middlesex, had very few savings committees and were notable by their absence from the list of those most active in raising retail funds for war. Scotland, in contrast, raised funds aggressively.[542] The point is not that the records of those handing money to wartime savings associations or local Post Office Savings Banks were wrong. But these records did not include War Loan purchases made mostly through banks and recorded in the ledgers held at the Bank of England. The sampling shows that while very large numbers of smaller investors bought War Loan, most capital came from a relatively small group of very wealthy individuals and businesses and contradicts the general message from the savings associations. For example, the second sample of War Loan from investors on the Bank of England ledgers shows that London and Middlesex were contributing the largest shares of capital and that Scotland did not become a significant contributor of capital until the post-war period. Moreover, the lion's share of financial capital was raised from investors recorded in the Bank of England's ledgers, not through Post Office Savings Banks.

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[541] Stevenson, *With Our Backs to the Wall, 352-353.*

[542] Gregory, *The Last Great War*, 220–33.

Therefore, the availability of pools of privately-owned financial capital allowed Britain, almost uniquely among the original combatants, to raise the capital that kept its allies in the war.

Capital extraction required a combination of mechanisms to persuade investors to empty their pockets. Despite the financial resources of its citizens, Britain's war fund-raising faced very significant challenges. The first was that the severe inequality of income and wealth at the outbreak of war meant that capital ownership was narrow and deep. Relatively few individuals and institutions had liquid capital that could be tapped by government, even at high prices. The second was that the tax base was also narrow at the outbreak of war, limiting opportunities for coerced capital through taxation. Not until 1915 was the income tax base expanded. Moreover, the Liberal government's commitment to free trade made it reluctant to set tariffs on goods although it eventually overcame those scruples. The third challenge was that Britons held significant capital abroad. Britain was the world's capital exporter in 1914. Estimates of capital abroad were reliably in the range of £4 billion. The ultimate plan to encourage this back on shore coincided with the objectives sought on the second front, that of maintaining the value of sterling against the US dollar. Moreover, there was fierce competition for capital that stayed at home. For example, on 5 November 1914, the day the 3½% War Loan 1925–28 was announced, investors on the Liverpool Stock Exchange could also deploy their capital among 16 domestic railway issues, seven foreign bond issues, four colonial rail issues, 14 foreign railway issues, five iron, steel or coal companies, and 23 'miscellaneous' shares including those of Harrods, Selfridge Preference, Lipton, and Marconi. There were a further 41 choices of shares in mining companies, 12 choices of shares in oil companies and a further eight shares in oil and rubber companies.[543]

Broadly, this research concludes that far from the egalitarian message that accompanied efforts to sell War Loan in Britain, the securities that ultimately attracted the greatest

[543] No Author, Stock Markets Re-Open Dull, *Liverpool Daily Post*, 5 November 1914:10.

percentage of capital were those which were designed by some of the nation's wealthiest citizens and had the effect of furthering the wealth of that group of citizens. The decisions early in the war to issue loans at a discount to face value and to allow conversions into new loans at sub-market rates were indeed costly to taxpayers. But longer term, particularly during the post-war years, they were certainly beneficial to those who already had capital, including that previously invested in government stock. But perhaps the greatest tilt in favour of the already wealthy was the decision to withhold the century-old practice of deduction of income tax at the basic rate at the time of dividend payments. The full economic effects of this decision cannot be approximated without much more research and may be impossible to ascertain ever. Nevertheless, there does not appear to be any clear reason why this concession should have been made in January 1917 ahead of the biggest single capital-raising exercise of the war. One explanation might be that Britain was at that point fairly desperate in its need for fresh capital, as archival materials about the design of the securities discussed between bankers and Treasury officials show.[544] It may have also reflected a desire not to set an advertised interest rate above 5%, since an Exchequer bond at 6% some months earlier had attracted opprobrium.[545] A rate above 5% might also have been interpreted as a sign of desperation. The 5% War Loan 1929–47 was not the first to offer the freedom from income tax collection at the time of dividend payment; Exchequer bonds issued in 1915 and 1916 also did not deduct tax at source. However, Exchequer bonds were sold 'on tap'; that is, they were sold whenever an investor rolled up to his bank and offered to purchase one. Deducting tax at source would have been administratively difficult. The investor that bought an Exchequer bond the day after dividend payment would be entitled to a much higher dividend six months later than one who had purchased one the day before dividend date. Each investor would have had vastly different tax liabilities. But the 5% War Loan had no such complication.

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[544] TNA T172/746 Memoranda, Summaries of Meetings between Bonar Law and members of the Treasury Committee of Clearing House Bankers 23 December – 8 January 1917.

[545] No Author, *The Economist*, Issue of 30 September 1916, 555.

The senior clearing bank executives negotiating terms of the new War Loan early in 1917 were certainly among Britain's wealthiest citizens; their largest clients would have been as well. Evidence that the securities were designed with the wealthy in mind emerges from records of meetings held in early 1917 between the then Chancellor, Andrew Bonar Law, and senior representatives of Britain's largest clearing banks, representatives of its insurance companies and representatives of the London Stock Exchange. It was the clearing bankers who pressed for a tax-exempt issue, a design which Bonar Law resisted on the grounds that it appeared to favour the wealthy. Ultimately, the 1917 borrowing consisted of the 5% War Loan 1929–47 and a 4% 'tax-compounded' issue at par where dividends were exempt from income tax but not supertax.[546] But for all the bankers' insistence on the need for explicit tax relief on the design of the new War Loan, the 'tax compounded' 4% issue was largely ignored by even the wealthiest investors in favour of the 5% War Loan. While the 5% War Loan 1929–47 raised £2,075 million, the tax-advantaged 4% War Loan 1929–42 raised a mere £52 million. If the 4% War Loan, after tax, was as advantageous as the 5% War Loan, why did investors ignore it in droves? E.V. Morgan speculated that the lack of interest in the latter was 'an interesting indication of investors' optimism as to future rates of taxation'.[547] However, with the hindsight revealed by archival materials on the extent of tax avoidance during the interwar years, the failure to deduct tax at the time of dividend payment was interpreted by investors as little more than a wink and a nod in the direction of tax avoidance. Buyers are likely to have calculated that they might be able to pocket the higher annual dividend payment while avoiding detection by tax authorities. And the evidence suggests that they did.

Tilting terms of War Loan so blatantly in favour of the very wealthy had a certain logic; there was little point in directing efforts to raise capital from those who did not have it in the first place. But as the war drew on, efforts were made to entice capital from those with only limited quantities of it. Great ceremony was attached to efforts by those of very modest means to put aside capital for the war effort. Various campaigns, while conceding

[546] Wormell, *Management of the National Debt,* 320–321.

[547] Morgan, *Studies in British Financial Policy,* 112.

the advantages of lending for war, also portrayed the act as patriotic and selfless. In the end, it was anything but that. The reality was that investment in War Loan, for those able to buy and hold through 1922, proved a highly profitable, low-risk method of growing wealth. Not only were investors the recipients of a dividend that grew in real terms as the deflation of the 1920s took hold, they also benefited from appreciating capital values. The reality is that the greatest percentage of capital was raised from those with the greatest wealth at the outbreak of war, during wartime and after the war. This is well illustrated by looking at cash proceeds raised for the initial launch of the 5% War Loan 1929–47. Roughly equal numbers of subscribers – about 1.06 million people or institutions – signed up for War Loan issued through the Bank of England and that issued through the Post Office where typically far smaller amounts were invested. The former raised £966.7 million while the latter raised £38.4 million. The remainder of the £2.1 billion for that War Loan came from conversions of older issues.[548] Moreover, those with access to capital in 1914 were best placed to profit from it during the post-war years, the sampling of War Loan investors shows. This provides an additional insight into the broad theory outlined by economist Thomas Piketty, who has examined inequality in incomes and wealth in industrialized nations over centuries. Broadly, Piketty concluded that rapid economic growth in various countries did not alter the value of capital stock; in other words, people did not become relatively wealthier when the rate of national income grew more rapidly. Instead, the value of capital remained constant at six to seven times national income for most industrialized countries, at least until the outbreak of the First World War. That meant that those who held capital would see their own personal wealth grow more rapidly than those whose wealth came only from labour because wage growth is more likely to be linked to that of national income.[549] Piketty offers another insight into British government borrowing during the eighteenth and nineteenth centuries particularly; for one thing, it allowed government to borrow indefinitely. The Consolidated Annuities which dominated those securities need never have been repaid by government. Piketty argues that this dependency by government on private capital

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[548] Wormell, *Management of the National Debt*, Table 11.4, 340.

[549] Piketty,*Capital in the Twenty-First Century*, 164–66.

‘enhanced the influence’ of private wealth in society. Second, this government dependence on borrowing was far more beneficial to the wealthy than the alternative means of raising funds for war – that of taxation – ever would have been. As a result of low tax levels, those with capital were able to accelerate their rate of savings, producing even higher amounts of capital.[550] Whereas national capital averaged six to seven years of national income in the eighteenth and nineteenth centuries, this collapsed after the First World War and by the 1950s was no more than two to three times national income.[551] This implies that as Britain entered the First World War, those with their own store of capital were better placed to see gains that were not available to those without it.

That capital as a multiple of national income should have collapsed in the years after the war – a phenomenon seen in many other industrialized nations as well – is not a reflection of the relative returns on War Loan. Investors after the war had many more options open to them than they had during 1914–18. But perhaps more critically, the interwar years were characterized by the adoption of public policies that had the effect of reducing inequality. This required the higher rates of tax prevailing during wartime to broadly remain in place. Martin Daunton describes how the then Chancellor, Winston Churchill, set out to design tax policy during the 1920s. He notes that the Treasury’s twin concerns at the time were debt redemption and financial stability, but that these had to be addressed within the context of a population questioning the legitimacy of the state. The solution was to maintain wartime levels of estate duty – a direct attack on inherited wealth which is likely to have eaten into national averages of capital to income – but to tilt the income tax reductions in favour of those in the middle classes, particularly those with dependent children. This reduced income taxes for a group of middle-class taxpayers while doing nothing to cut the burden of death duties for those with the largest estates.[552] Churchill effectively offset taxation of the incomes of the living by heavy taxation of the wealth of the dead. The fact that overall inequality of wealth in Britain

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[550] Piketty, *Capital in the Twenty-First Century*, 129–30.

[551] Piketty, *Capital in the Twenty-First Century*, 116–17.

[552] Daunton, *Just Taxes*, 132-134.

contracted in the years 1914–45 and that the multiple of capital to income during those years was sharply reduced, does not in any way detract from the fact that War Loan was particularly beneficial to the already wealthy and that these individuals and businesses increased their holdings of it fairly steadily in the years 1914–32. It was simply that Britain's overall economic growth and the effects of certain tax and spending policies combined to reduce inequality nationally. This did not mean that pockets of wealth did not do exceptionally well during those years.

Where the capital came from

Aside from the general point that capital came from wealthy individuals and institutions, pinpointing the specific source of investors capital through ledger records proved a challenge. That is because a very large percentage of those in the ledgers did not list their occupation. These fell into two camps: the first was women. Women wealthy enough to have had capital to invest were generally considered unlikely to be employed. The single most common occupation for women in 1911 was domestic service, a line of work unlikely to generate enough income for investment.[553] Women in the ledgers are only recorded by their relationship to a man: married, widowed or spinster. For male investors, the ledgers record male occupations. However, over half of the first sample and just under half of the second sample record men's occupations as those which are not recognized as remunerative employment. That is, they describe themselves as 'Gentleman' or 'Esquire' or some other honorific. However, matching the identities of these male investors in the ledgers with those recorded in the 1911 Census reveals that there is no single theme which characterizes either their form of employment or the amount of wealth these are likely to have had. Indeed, groups of self-identified gentlemen and esquires emerge as solicitors and barristers, or medical professionals, when Census documents are consulted.

Two big themes emerged from the samples; the first applied only to men. That is that the self-identified gentlemen and esquires were apparently describing a social aspiration

[553] Routh, *Occupation and Pay in Great Britain*: 65.

more than a source of income or capital when they listed their occupation. The urge to express this aspiration was not universal; a large and rising percentage of male retail investors gave their occupations over the 1914–32 period, and many of these were engaged in work that was no different from that of the solicitors, stockbrokers or physicians describing themselves as 'gents'. By the third sample, these were little more than a third of male retail investors and their average investment was the same size as that for men generally.

Second, the long arm of inherited wealth is evident. This is particularly the case among female investors who appear to have inherited their capital from their own families or that of their husbands or some combination of the two. Although some of the literature on women as investors during the late nineteenth and early twentieth centuries suggest these were canny stock pickers, mostly these had the good fortune to have been related to wealth.[554] Over time, women gradually emerge as income generators, but these are few. The long arm of inherited wealth can also be seen among men, particularly among male professionals who most often are from families of gentry. The requirements of entering the professions of law, medicine, clergy and the military are such that without private education and social capital, the path into this work would be barred. The prevalence of inherited wealth among War Loan investors has implications for the broad distributive effects, Piketty suggests. This is because during those periods when the rates of return on capital exceed the growth rate of the overall economy, gains on inherited wealth grow even faster. Having inherited a pool of capital, less needs to be put aside in the form of savings from income in order to generate a rate of return.[555] However even if those with inherited capital were becoming even more wealthy more quickly, the ledger samples offer evidence that some of those of relatively modest circumstances were also acquiring the ability to put aside capital in the form of financial savings of their own. Over the

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[554] Rutterford et al. 'Who comprised the nation of shareholders?': 157–87. J. Rutterford, and J. Maltby, 'The Widow, The Clergyman and the Reckless: Women Investors in England 1830–1914', *Feminist Economics*, 12.1 (2006): 111–38.

[555] Piketty, *Capital in the Twenty-First Century*, 26.

1914–32 sample period, it becomes evident that wartime itself gave rise to a redistribution of wealth in certain industries, occupations and geographic regions. Among these are men engaged in so-called distributive trades as middlemen between producers and wholesalers or between wholesalers and retail-facing businesses. Many of these are transacting in commodities which saw greatly inflated prices during wartime. Inflated prices led to inflated profits. Another striking investor group are those engaged in skilled labour and tradesmen and a subset of educated professionals that includes accountants and architects. The latter were those whose skills were needed as businesses grew and consolidated and a premium was placed on skills that aided the management of larger organizations. The former in part reflects the effects of labour shortages in war-related industries which forced government to intercede in wage negotiations in a way it never had previously. This tipped the balance of the way profits were distributed in certain industries – railways and coal in particular – handing higher wages to workers than they had been able to garner pre-1914. In the third sample, for example, there are five skilled workers employed by railways with investments of £50 to £795 each, up from two in the first sample with holdings of £200 apiece. Among educated professionals, accountants are particularly significant by the third sample. These are occupations where inherited wealth and a private school education would have mattered less. The participation of these groups as investors in War Loan sold through the Bank of England points towards the modest but gradual reduction in income inequality suggested by studies discussed earlier in this research which look at patterns of income inequality in the twentieth century. (Chapter 3). These two groups together accounted for 6.24 per cent of all retail investors in the first sample but only 3.5 per cent of retail capital in War Loan. By the third sample covering the interwar years, these two groups account for 10.0 per cent of retail investors by number and 9.1 per cent of all retail capital.

Finally, this research suggests that capital which went into War Loan in part reflects the effects of war itself. This becomes most visible in Chapter 5 where the geographic location of investors is analysed. The geographic analysis of how investment shifted its centre of gravity from the financial capital of London and the south east to the north east, north west and Scotland over the sample period offers for the first time a detailed and granular analysis of just how war expenditure and war-related industries altered wealth and income patterns. Just under a third of all investment in War Loan came from those who had been either employed by, or were owners of, industries bolstered by wartime expenditure and demand. Moreover, the multiplier effects of wealth accumulation and wartime spending can be seen from the ledger samples. By the time of the second sample 1915–24, for example, the geographic density of War Loan ownership in the north west of England – centre of the cotton and spinning industries which were able to capitalise on unfettered demand for their goods – at one loan per 19 head of total population was nearly as great as that in London. There is other testimony to the multiplier effects of wartime spending; two stockbrokers in the north east, home to the hard wool industry which did very well out of war but which suffered a decline in demand after, transacted purchases of hundreds of thousands of pounds of War Loan on behalf of local investors. The purchases took place as long-time investors in the predominant local industry, that of hard wool, were facing a significant downturn in demand and profitability. The trading patterns suggest that those in the industry were withdrawing their capital and investing instead in War Loans.

And finally, the capital came from businesses and financial institutions. The sampling exercise points to a significant role for 'institutions' – banks, insurance companies, stockbrokers, businesses, charities and trusts – who were buyers of War Loan. However, the composition of this group changed sharply over time, reflecting not only the fortunes of various industries but also the evolving limits on investment choices. Around 45 per cent of the first sample of capital was raised from these institutions, mostly in the financial sector. At the outbreak of war, the financial sector was flush with liquidity. Of the nearly £950 million raised from institutions, over £770 million came from financial firms. It showed a strong London bias. Of 67 institutions, 51 are finance related. Of these, 18 are based in London. By the second sample, institutions have nearly disappeared as significant capital providers. The list of institutions is dominated by charities as corporates squirrelled away profits to pay for EPD and for capital reinvestment in business. But after the war, as industries sold off assets that were unable to provide returns on capital that they had during wartime, institutions resurfaced once again. Some

39 institutions provided just over a quarter of all capital, but fewer than half of these – 15 out of the total – were either financial institutions or intermediaries. Only four were London-based. Of the remainder, 12 were corporates, including two of the largest institutional investors, both in the shipping industry. Viewed in aggregate, the post-war period was one of capital recycling. That which had been deployed in industries with high returns in wartime was recycled into low-risk War Loan. Thus, both retail and institutional investors, throughout the sample period, followed similar patterns of investment; at the start of war, those with capital to spare rushed to lend; during wartime, they held fire. But after the war was over and many wartime restrictions on investment had been lifted, War Loan remained a significant draw for capital.

It is impossible to overlook the fact that war, and the issuance of War Loan, had more than a negligible impact on Britain's overall economic activity. There are two general conclusions to be drawn from the ledger samples that help us to answer a question that has not been ever addressed before. That is, was the payment of dividends on War Loan re-distributive effects? Did it recycle tax revenues levied on the wealthy into the hands of those on modest means, boosting their consumption? The Colwyn Committee concluded that the group of wealthy investors with the largest holdings were also paying the largest percentage of tax revenue. In effect, this group were paying their own dividends from themselves to themselves. Thus, payment of dividends to investors that was raised by taxation of income had a neutral effect on economic activity.

But that is not what the samples tell us. These show an increasing concentration of capital in the hands of the largest investors who have minimum holdings of £1,000 each. By the end of the sample period, over 85 per cent of capital from male retail investors is held by just a quarter of all male investors. Women retail investors show a similar, albeit more modest, concentration. And if anything, using data from Inland Revenue records, War Loan investors are slightly more likely to have significant wealth at time of death than the British population generally.

Moreover, although there is no evidence in the ledger samples themselves, files at The National Archives and at the Bank of England point to widespread tax avoidance among holders of War Loan. As Inland Revenue officials warned at the time of launch of the 5% War Loan 1929–47, failure to collect tax on dividends as they were paid opened the door to widespread tax avoidance techniques. Actual concerns about these first emerge at least by 1924, after having been underway for some unspecified period. They apparently continue, unabated, until at least 1932 when the coupon is cut to 3½%. Moreover, those investors with the largest holdings were most likely to have access to the mechanisms most commonly used to avoid tax payments. This involved the sale of securities to a financial house or brokerage just before payment of a dividend and the immediate repurchase by the original owner. Sir Winston Churchill, as Chancellor of the Exchequer, vowed to stamp out the practice in his Budget speech of 1927. But as late as 1931, Treasury files show the practice continuing. While it is impossible to quantify the effects of the transfer of tax revenues from the broader middle and working classes to the hands of wealthier investors – where it was infrequently taxed – the suggestion is clear. War Loan payments were likely to have had some redistributive effect on demand and consumption in Britain during the interwar years. But this redistribution went the wrong way.

There is a second insight that this research offers. Although it was never intended to be part of the conclusion, the research suggests that the theory outlined by economic historian Thomas Piketty (and others) that rates of return on capital outstrip those on income or labour, was likely to have been at work in Britain during and after the First World War. Piketty and others show that the years 1914–45 were a period of declining inequality. This likely reflects not only structural changes to Britain's economy during the period but also the effects of much higher taxation than ever previously levied. Nevertheless, the profitability of War Loan in real terms is evident. While the studies of Piketty and others point to an overall decline in rates of return on capital, what is presented are national averages. War Loan holders, whatever happened to the remainder of their wealth, did very well out of it over the period. Of course, those who bought in the price troughs did better than others and those forced to sell during the crisis years of

1921–22 would have done relatively badly. But overall, in the deflationary post-war years as Britain sought to restore the relative sterling/dollar exchange rate, the combined effects of monetary and fiscal policy were wildly beneficial to War Loan investors. This research for the first time offers a granular look at how those benefits were distributed across British households and businesses.

Next steps for research

This research, and the sampling of the ledgers that prompted it, raise the possibility of significant avenues for further study. These fall into three general categories; the first of these involve delving more deeply into the three ledger samples. The second category involves trying to understand the wider economic effects of War Loan finance. The third category involves the possibility of making comparisons with the investor base of other combatants in the First World War also struggling to raise capital from their citizens. As mentioned earlier, Stevenson notes that the US investors were heavily weighted towards wealthy individuals and businesses. Comparing the US and UK investor bases would be a valuable exercise in looking at comparable distributions of wealth.

The way the ledgers are organized allows for significant follow-up on the fortunes of individual investors. One possibility involves looking at those investors who sold their securities, possibly under financial duress. Of the second sample covering years 1915 to 1924, only 358 of 1,940 investors sold securities before the ledgers were closed and of these, 255 did so before the end of 1920 as a deep recession set in. However, a further 1,451 investors either chose to amalgamate their holdings in another ledger or were part of a transfer exercise as the original ledger was closed. Because it is possible to trace investors through their new ledger, a review of these entries might offer an insight into the nature of the investors most badly hit by the 1921–22 downturn.

One of the areas that offers the most opportunities for future research involves a much closer look into the lives of individual investors. The data in the ledgers point to the possibility of research into the ‘how and why’ of War Loan investment. Behind the data are real people who lived through the First World War. Who were these people and what motivated their investment decision? Such research would offer greater clarity into the extent to which investors were only seeking safe rates of return or whether they were genuinely motivated by patriotism, nationalism or simple fear of German domination. It is clear from the ledgers that some individuals are likely to have left behind far more records of their activities than those described simply in Census or Probate records. A closer look at how and why individuals made the decision to invest in War Loan would offer greater clarity about motivations. Did investors sell other securities or assets to raise funds to buy War Loan? Were those with husbands or sons who were liable to be conscripted into military service more likely than, say, the childless, to buy War Loan? A sub-set of the sample emerges as parents of, or other relatives of, those who lost their lives at the war front. Following up on those individuals could help put investment decisions in a different light.

Another area for enquiry into the nature of individual investors would be to use local archival material to flesh out a more rounded picture of the nature of the businesses they ran or in which they were employed. This would focus on the non-financial businesses. A look at company records might help establish why these chose to invest in War Loan. How were these businesses affected by war? Did they fear some adverse regulatory or tax ruling might affect their operations and hope that a purchase of War Loan would deter policymakers? Companies related to shipping would be of interest in this respect because of the outsized profits that industry enjoyed during wartime. Did companies who lost multiple employees at the front choose to buy War Loan to show their patriotism to workers? Another area for enquiry might take a close look at those with the smallest holdings of War Loan; in many instances, these would have been better off using a local Post Office Savings Bank for their investment. Indeed, one of the most intriguing avenues for research would be to seek the records of those in specific regions who had made purchases through the Post Office Savings Banks. How do their characteristics compare with those who made purchases that were ultimately lodged in Bank of England ledgers?

A second set of follow-up research projects concerns analysis of the broader economic effects of the collection of capital from War Loan investors and the subsequent payment of dividends to those investors. In fact, this was one of the first questions which would occur to any reader of the ledgers in the very first instance. Several historians of the economics of the post-war period, particularly Ernest V. Morgan and Ursula Hicks have raised the redistributive effects of War Loan dividend payments as a possible factor affecting both consumption and savings patterns in the post-war years.[556] Both noted that because the mix of investors was unknown at the time of their respective inquiries, it was impossible to come up with answers. While the sample results make it possible to generalise the redistributive effects of War Loan dividend, there is scope for much better economic analysis. Did payment of these dividends boost demand in Britain's sluggish interwar economy? It is a particularly intriguing question; economist John Maynard Keynes did not unveil his theory about the ability of government spending to counteract deflation until 1936.[557] However, he strongly endorsed David Lloyd George's 1929 election campaign in which the centrepiece of policy called for a sharp rise in government spending in order to counteract deflation and unemployment.[558] The sampling exercise for the first time provides some of the tools to enable an analysis of the redistributive effects of War Loan dividend payments. Of course, these effects would have to be viewed in the context of other aspects of tax and expenditure policy; cuts in taxes to families raising multiple children might have had one effect but higher taxes on other income earners might have cancelled that out. Also, expenditure on social programmes such as state pensions and expanded unemployment insurance, along with higher borrowing by local authorities, would have to be considered as well. Isolating War Loan dividend payments is likely to be a complex exercise. Nevertheless, this is worth pursuing. The fact that this research points to, first, increasing concentration of capital in the hands of fewer investors and second, to the widespread avoidance of income tax

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[556] Ursula Hicks, *The Finance of British Government*, 354.

[557] John M. Keynes, *The General Theory of Employment, Interest and Money*, (London: Springer, 1936).

[558] J.M. Keynes, 'Can Lloyd George Do It?' in *Essays in persuasion* (London: Palgrave Macmillan), 86–125.

payments due on dividends suggests that, in total, very little redistribution of income went on via War Loan. Despite the very large number of smaller investors, most of the capital was in the hands of a very small number of very wealthy individuals and businesses. That redistribution which did occur, it seems, likely did so in the wrong direction, delivering cash to those least likely to consume it at a time of slumping demand.

Another avenue for enquiry is the extent to which the shocks of financing the First World War prepared Britain for the economic management of the Second World War, a mere two decades later. This is particularly pertinent since official government records show that at least as early as 1926, considerations of how to manage an economy in wartime were already under discussion with emphasis on the need to control inflation and profits.[559] Richard Sayers, a former Treasury official, writing the history of finance in the Second World War, notes that the lessons of the First World War were writ large. 'In these technical details of the conduct of Government borrowing, success is necessarily dependent upon the sureness of touch shown by the authorities. In Britain in 1914–18 – or at least in the first two years of that war – the Treasury's competence had fallen sadly short of the situation's requirements.'[560] Sayers goes on to say that the policy of allowing the markets to determine the price of government borrowing during the First World War 'proved unmanageable for a long war', and that it was precisely this painful experience which gave rise to the 'Three Per Cent War' capping rates in the years 1939–45. That was around the level to which investors had become accustomed during the 1930s following conversion of the 5% War Loan 1929–47 to a 3½% perpetual. One avenue for future research might be to obtain records of the identities of investors in loans generated

[559] TNA, T 175/27, Letter, to Warren, signed P.A. Hankey, 28 February 1928. Letter notes 'You will remember that the Committee of Imperial Defence agreed (219th meeting), Conclusion 8, December 16th, 1926) that the question of Profits in War should be considered by a Treasury Committee'. Memo, Heading 'Man Power Sub-Committee, Control of Profits and Prices in War', initialled W.G.G, 23 February 1928, 1–3.

[560] Richard Sayers, *Financial Policy 1939–45*, (London: HMSO, 1956), 9.

during the Second World War to see the extent to which the investor base had changed from that of the years 1914–32.

Another topic for research might be one much more directly connected with UK public finances. Britain historically has had longer maturity debt following the Second World War than many other European nations. The years of the First World War and those of the two decades which followed emerge from this and other research as one enduring and frantic scramble to obtain new capital and to stretch out maturities or roll over existing debt. To what extent did this experience influence the design of Britain's debt profile today? There is a conventional wisdom suggesting that Germany's views on inflation were shaped by its own dreadful experience battling hyper-inflation during the interwar period, making it reluctant, even today, to step up spending in the face of weak demand. Is it possible that Britain's frantic, expensive and largely unsuccessful efforts to fend off the need to repay war finance led it to its current policy of borrowing for much longer maturities than any other G7 nation?

Overall, this research adds to the historiography of the First World War by unravelling the critical role that access to private financial capital played in the ultimate outcome of the conflict. While there has been some research into the economic background of war, and into the post-war effects on both domestic economies and finance, there is almost no literature on how any of the combatants actually paid for years of global warfare on an industrial scale that none had foreseen at the outset. Without access to armaments, war materials and food, none of the combatants could have endured if they did not have these goods and one thing that existing literature does make clear is that these were in very limited supply by the end of 1918. This research, for the first time, draws attention to the role that access to capital played in the ultimate outcome of the First World War.

It is certain that however many avenues for future research are described here, many more will open in the future. The First World War ledgers are a treasure trove for historians and economists hoping to gain a deeper understanding of Britain's turbulent twentieth century.

APPENDIX 1
Methodology

The basis for this research is the opening for the first time of the collection of ledgers containing details of the investors who purchased securities that financed Britain and its allies in the First World War. Understanding who the investors were and how they came to have capital to invest allows us to explain how Britain was able to outlast the Entente during the war and to ultimately declare itself the victor. Given the number of ledgers and the time period these span, no analysis is possible without a robust method to sample the entries and to monitor how these changed over time.

Understanding the Ledgers

The first step towards establishing a methodology for sampling the ledgers of War Loan investors in the First World War required understanding exactly how the ledgers were organised. According to the Bank's own internal history of its ledger system, there are two types of volumes. The first of these, the so-called 'Alphabets' are simply lists of investors in various government stocks. The do not include information such as addresses, value of purchases or dates of transactions. For the purpose of this exercise, these can be ignored completely.

The second group, that of 'Ledgers' which uses a system which the Bank itself describes as 'complex and idiosyncratic' and may reflect early concerns about the possibility of fraud; many members of the public may have had access to records. Under this system, the names of sole or first stockholders are initially indexed alphabetically by the first letter of their surname. When there are many investors whose surname begins with the same letter, the series are broken up so that the first letter is followed by the first vowel. This approach also applies to corporate or business investors in War Loan. However, second or third investors in a participating as a group are not identified in any index. Volumes are grouped so that vowels run consecutively after each new letter at the start of a name. When there are many investors whose surname begins with the same letter, the ledgers are broken up in broadly alphabetical order by second, third and fourth letters of the last name. Each ledger entry contains the name of the lead investor, the address, and the date and amount of each purchase. Dates are expressed as YY/MM/DD. Each entry also records the method used to make the purchase (eg., stockbroker, scrip application), and the dates and amounts of any disposals. The format is that of double-entry bookkeeping so that purchases always balance with sales. The entry also records the occupation of male investors and the marital status of female investors.

According to the Bank's own internal description of its record keeping, 'As a sub-division became full, it was the practice to create a supplementary section at the end of each alphabetical letter or at the end of each volume: usually these supplements are numbered and their number is given in the main sub-division. '…An unmarried female investor who wed subsequent to their purchase would have the name of the account changed to match the surname of their new husband. As ledgers became full, they were rewritten into new ledgers. However, to conserve space, only live accounts were carried across. The names of those who had sold their stakes were written into 'Gones' books and not included in the new ledgers. Against the name of the first or sole stockholder will be found the number of the account or 'folio' in the relevant ledger to which records were moved. This makes it possible to track an investor's holding over time.

However, as the war progressed and the volume of securities increased significantly, certain shortcuts began to appear. Although the ledgers for the first series of War Loan appear recorded in strict chronological order, that is not the case for later series. Pages appear to have been lifted from earlier ledgers, re-numbered and pasted into later ledgers. Also, some very large stocks are broken into numerous cut-ups: 5% War Stock, for example, contains 60 cut-ups starting with Aa–Ao. Individual names within a cut-up are not close sorted alphabetically and occur broadly in the order in which they were entered, with the caveat that some additional pages may have been inserted in between. Thus, pages with names of investors who acquired 5% War Loan through conversion of a stock purchased in 1915 or 1916 – or indeed, via 2 ½% Consols acquired many years earlier – crop up following entries of those who would have purchased War Loan outright in 1917.

Understanding the CALM electronic index to the ledgers

The series beginning with the letters AC27/ denotes ledgers associated with War Loan. However, the ledgers were still closed to the public at that time and no further examination of their contents was possible. The task of identifying the relevant ledgers for a coherent sampling exercise was therefore complicated by the need to understand how to interpret labels that were difficult to differentiate from each other. There are roughly 1,400 War Loan-related ledgers listed in CALM whose start dates cover the period 1914–32. An Excel spread sheet of War Loan entries and their respective catalogue numbers helps to illustrate this point.

Table 8.1: Long-term Securities Floated 1914-1919 and Identifying Codes in CALM Electronic Catalogue

Year of Issue	Type and Coupon	Maturity Date	Loan Jacket	CALM Number DEED	CALM Number BOOK	A-Z Alphabet Index	A-Z Gones
1914							
	3 1/2% War Loan	1925/28	AC30/339		AC27/7719-7743		AC27/7771
			AC19/771				
1915							
	3% Exchequer	1920	AC30/341				
			AC19/160				
	5% Exchequer	1920	AC19/161		AC27/3350-3371	AC27/3346-3347	
			AC30/349				
	4 1/2% War Loan	1925-45	AC19/772		AC27/7816-7831	AC27/7814	AC27/7815
			AC30/368				AC27/7855
	5% Exchequer	1920					
1916							
	5% Exchequer	1919	AC19/162				AC27/3337
			AC30/862				
	5% Exchequer	1921	AC19/163	AC27/3397-3414	AC27/3386-3394	AC27/3327	AC27/3326
	6% Exchequer	1920	AC19/164		AC27/3348-3370		
			AC30/358				
			AC19/351				
1917	**4% NWB Tax CMPD.**	1929-42			AC27/7778-7784		
	5% War Loan	1929-47	AC30/355	AC27/8955-9035	AC27/8174-8641		AC27/8927-8954
	5% Exchequer	1919/1922		AC27/3411-3414	AC27/3405-3408	AC27/3404-3405	
	5% National War Bond	1922	AC19/468	AC27/4619-4634	AC27/4595-4610	AC27/4618	
			AC30/405				
	5% National War Bond	1924		AC27/44710-4711**	AC27/4700-4703		AC27/4669 (DEED)
							AC27/4709
	5% National War Bond	1927		AC27/4825-4890	AC27/4748-4751	AC27/4772-4773	AC27/4770-4771
	4% National War Bond NWB	1927		AC27/4767-4768	AC27/4748-4751		AC27/4746
1918							
	5% National War Bond	01/04/1923	AC19/469	AC27/4653-4669	AC27/4638-4646		AC27/4638
	5% National War Bond	1925	AC19/469		AC27/4731-4732		
	5% National War Bond	1928	AC19/469	AC27/4969-4991	AC27/4929-4951		AC27/4898
	5% National War Bond	1928	AC19/4969				
	5% National War Bond	1/9/1923	AC19/470	AC27/4688-4695	AC27/4672-4679		AC27/4671
	5% National War Bond	1925	AC19/470	AC27/4742-4743	AC27/4734-4735		AC27/4996-4997
	5% National War Bond	1928	AC19/470	AC27/5051-5108	AC27/5000-5028		
	4% NWB Tax CMPD.	1928	AC19/470	AC27/4920-4921			
1919							
	5% National War Bond	1924			AC27/4714, 4720-21		
	5% National War Bond	1929		AC27/5145-5152			
	4% NWB Tax CMPD.	1929		AC27/5125			
	4% Victory Bonds	1920-76	AC30`768		AC27/7635-7662		
			AC19/768				
	4% Funding Loan	1960/1990	AC30/866				
			AC19/228				
1921	**3 1/2% Conversion**	On/After 1961					
1932	**5% War Converted to 3 1/2%**	None		AC27/9051-9322			

Even quantifying the exact sums raised for war finance remains a challenge; billions of pounds in short-term funds were raised from the sale of short-dated Treasury bills as well as through use of the Ways and Means account at the Bank of England. Moreover, from 1915, war loans and bonds contained unusual conversion features allowing holders of older, less attractive issues to convert to the most recent issue which offered a higher yield. It is these conversion features which make the sampling exercise so problematic; the exact sums raised from retail investors remains unknown. One objective of this research is to try to answer precisely that question. For example, as noted in Chapter 2 (Battle for Capital), of the £350m of 3½% War Loan due 1925/28 sold in 1914, only £91m was sold to investors. When the 4½% War Loan due 1925/45 was issued in 1915, it raised £900.9m, much of it from banks and the Bank of England which were still holding the loss-making 3½% War Loan issued of one year earlier on their books. The 1915 loan allowed banks to transfer their unwanted inventory to a new, more attractive, security. Of the single largest issue, the 5% War Loan due 1929/47 sold in the first quarter of 1917, nominally £2.1bn was raised. But over half of that represented conversions from older issues.[561] Moreover, although the ability to convert into that Loan was halted as of 16 February, 1917,[562] it was subsequently re-opened to conversion as the Exchequer struggled to pay down maturing issues during the decade following the end of the war.[563]. Despite efforts to refinance short term debt in 1919 via the Funding and Victory Loans – possibly allowing the classification of some later post-war issues as 'war loan' – Britain struggled to repay rapidly maturing obligations. Ultimately, a series of conversion offers to holders of war loan and bonds were made through the 1920's, several of which carried a coupon of 5% and others at 3½%. Finally, following Britain's decision to remove the gold standard for currency valuation, interest rates fell to a level in 1932 that allowed

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561 Wormell (2000) 339–340

562 Bank of England Archive, Loan Wallet AC30/354 '*LOANS OFFICE WALLET: WAR LOAN - 5% LOAN 1929-1947; 4% LOAN 1929-1942 JANUARY-FEBRUARY 1917'PART TWO'*

563 BoE Archive, ADM2/1, J.A.C. Osborne, nd, The Bank of England 1914–1921, Vol. 1., 471. https://www.bankofengland.co.uk/-/media/boe/files/archive/ww/boe-1914-1921-vol1-chapter3.pdf (accessed 1 June 2019).

refinancing of its mammoth 5% War Loan due 1929/47. That issue also carried a coupon of 3½%.

The ability of investors to convert debt to more attractive issues over the course of the war raises the challenge of any sampling exercise; an investor who purchased £100 of 3½% War Loan in 1914 could have converted that into 4½% War Loan in 1915 and again into 5% War Loan in 1917. That investor could appear as three different investors despite having made a single purchase and committed no more capital. A further complication is the fact that so many ledgers are labelled '3½% War Loan'. There are 271 ledgers of 3½% Deed stock and two separate series of Book stock, the first numbering 24 books and the second running over 221 books.

Taking account of the limited time available for sampling, I decided to narrow my research to three specific issues, the first of which was the 3½% War Loan 1925–28 and which was launched in November 1914. The second issue was the single, largest; that of the 5% War Loan 1929–47 launched in January 1917. Finally, in order to see how the investor base might have changed during the post-war years while Britain was so desperate for capital, I sought to look at ledgers covering secondary trading during the years 1919–32.

I was able to determine that to sample investors in the 3½% War Loan 1925–28, I need only look at the 24 volumes AC27/7719 – AC27/7743. There were 97,635 applications to buy loans with a total face value of £91.6m, far short of the £350m sought.[564] Using the sample size calculator on this website: https://www.surveysystem.com/sscalc.htm it appeared that a minimum of 383 names would be needed to achieve a sample that was robust to a 95% confidence level with a confidence interval of 5%. I initially thought to over-sample by a factor of 10 – and indeed, did so for the first two ledger volumes – but scaled it back to a factor of 5 simply due to concerns about time available. From each ledger, at 100-page intervals, I collected 17 names consecutively. My total sample size is

[564] Bank of England Archive, M7/156, p387

over 2100 names, giving a confidence interval of 2.12. Because of this, I feel that my sample is likely to offer a robust picture of the investor base.

Because the entries are in date-order, it allowed me to include those who not only signed up at the start, but those who purchased securities as news from the front became increasingly gloomy in 1915 and 1916. Most books contained 400 to 500 pages of investor entries, although some ledgers had as many as 600 pages. For example, AC27/7730 is nearly 600 pages and includes investors whose first purchase of the relevant loan was in July or August 1916, a point where investors already could choose among three War-related issues, all of which offered higher coupons than that of the first War Loan. However, given that the 3½% War Loan was trading at a price of 86.25 in August 1916, delivering a Gross Redemption Yield of 5.04%, these purchases are explicable.[565]

Each ledger page contains space for eight entries. The first three spaces on each page are allocated for accounts where there are multiple investors. Although these are not exclusively used this way, those accounts with two or more investors are most usually to be found at the top of a page. This pattern held during the entire 1914–32 period. My sampling method was to take roughly 78 names from each ledger book, taking 15 every 100 pages. I decided to use every book to avoid some geographic bias that is likely to emerge with certain surnames. Based on results of the 1881 Census, some names display strong regional bias that would likely have lasted long enough to show up in ledgers of First World War investors.[566]

For the second sample, it quickly became clear that I could not use the same method; for one thing, it occasionally turned up investors who were members of the same household. But more importantly, subsequent ledgers had been disassembled and reassembled and

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[565] Using this calculator tool: http://www.candidmoney.com/calculators/investment-redemption-yield-calculator (accessed 17 September 2019).
[566] http://gbnames.publicprofiler.org/

many had hundreds of blank pages in the middle. Instead, I decided to use a Random Integer Generator.[567] I would enter the page range of each sampled ledger and ask the system to generate 100 numbers corresponding to various pages. If the designated page was blank, I would move on to the page of the next number on the list. However, because of the designation of the first three entries for accounts of multiple investors, I had to ensure that each new randomly generated page number used an entry that followed on from that preceding it. That way, I have not under- or over-weighted accounts with multiple investors. I determined that the relevant ledgers were numbered AC27/8174–8641. There were 1,066,111 accounts created in ledgers at the Bank.[568] The survey sample calculator said that collecting 384 names would be enough to ensure a 95% confidence level and a 5% confidence interval. Again, I over sampled by a multiple of 5 to produce a sample of 1,940 investor identities. This delivers a confidence interval of 2.2, a much narrower interval than the 5 which is normally considered robust so again, I am reasonably confident that the picture created is accurate. I began by taking five names from each ledger but abandoned that approach by ledger AC27/8222. The act of taking out, and returning, so many ledgers proved much more time-consuming than I expected. I resorted to using the Random Integer Generator to select 15 names from every third volume.

By the time of the third sample, another sampling issue had arisen. This had to do with the method employed for transferring ownership of stock. (See Chapter 5). Until 1912, all government stock was ‘Book’ stock, also known as ‘inscribed’ or ‘registered’ stock with the owner’s details entered the books of the Bank of England. The system allowed for rapid sale of securities, with investors able to receive funds within an hour after instructing his broker. However, it required an investor to appear in person at the Bank with his stockbroker, or to grant a power of attorney whose signature had been registered. In all, it was a system convenient for those living in and around London but which raised transaction costs for those living at a distance. But that was not the only method by which

[567] This was the electronic page generator tool: https://www.random.org/integers/

[568] Wormell, *Management of the National Debt*, (London: Routledge, 2000) 340.

securities could be traded. By 1870, a system for the newly emerging class of industrial shares had grown up that was widely used on Britain's provincial exchanges. These were bought and sold through the use of a 'Deed', or written instrument, which was held by the owner and which became the genesis of paper shareholdings that prevailed until electronic records became mandatory in the 1990s. Transfer of government stocks by Deed was not possible at all until 1912, and at first, demand for that method was very slight. Moreover, the Bank of England levied high transfer costs on it. As the war progressed, the Bank of England was pressed by Treasury officials to cut the 2s:6d charge it levied on the transactions.[569] By the end of the war, Deed stock use had risen dramatically. This can be seen in the fact that there are no Deed ledgers shown for the 3½% War Loan 1925/28 issued in 1914 but 28 ledgers for those in Book form. By the time of the mammoth 5% War Loan 1929/47, issued in 1917, there are 80 ledgers of Deed stock, still a fraction of the 467 ledgers of Book stock for that issue. But at the sale of the first series of 5% National War Bonds late in 1917 – and which was the object of marketing exercises around the country known as 'Tank Weeks' and 'Businessmen's Weeks' – ledgers of Deed stock sales totalled 64, more than twice as many as the 31 ledgers of Book stock. Indeed, according to the Bank's own internal history, "with the enormous influx of stockholders from the Midlands and Northern Districts, a great demand rose for this form of holding. By 31st August 1921, at least 1,340,000 holdings were registered as transferred by Deed, up from just 1,000 in 1914'.[570] By the time of the third sample, there were 221 ledgers of 'Book' stock, but 367 ledgers of 'Deed' stock. The third sample comes from the Deed set of ledgers. To test that the Book and Deed ledgers had similar geographic distribution, I sampled roughly 100 names from each of two Book ledgers. There was very little geographic difference in investor distribution. Since no new War Loan was officially launched in the years 1919–32, I assumed that the number of accounts was equal to those of the second sample. However, that is not entirely correct. Holdings could be broken down into much smaller lots split among more

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[569] deMead, G.J.C. (1963) Bank of England Accountant's Department: Outline of the History and Working of the inscribed stock system. Bank of England, London

[570] Osborne, J.A.C. (undated), 471.

investors or equally, amalgamated in the hands of fewer, larger investors. Moreover, 5% War Loan 1929–47 could be surrendered at its issue price of 95 for payment of estate duties and certain other taxes, ensuring that some of the outstanding stock would be reduced. It was also held by various government departments, taking it out of circulation. However, the gross supply of that War Loan was also expanded by the conversion of older issues with shorter maturities into this highly liquid security.

Because these were ultimately converted into 3½ per cent stock that was not to be callable until after 1961, the period of secondary trading for the third sample would have been much longer than that for earlier issues. The books are grouped by first letter of the last name followed by vowels or consonants, exactly as earlier issues. Each letter series has as few as two or as many as six separate ledger volumes, each containing roughly 1,000 pages. I sampled 67 names from each of the letter groups. To determine which ledger within the series to use, I followed the dates on the spines. For example, there were five ledgers labelled ‘Moo–Mz’, bearing numbers AC27/9218–9222. I used AC27/9221 where entry dates fell between December 1924 and January 1939. However, because the period I am researching ended December 1932, I did not use material from the ledgers after that date.

Sorting the investors by Occupation

Sorting the investors by occupation proved a challenge in certain respects; particularly, this was because, so few retail investors used named occupations. To ensure that occupations were grouped ‘like with like’, I relied on investor’s own description of their means of earning a living. The largest single occupation for male retail investors, that of ‘Gentleman’ or ‘Esquire’ or some form of honorific such as Justice of the Peace are recorded as having no remunerative employment. Even when their identities could be determined from Census or other records, I have kept them in the categories they have chosen for themselves. I have kept this form of categorisation consistent throughout. Therefore, only those describing themselves as some form of engineer are in the category of engineers, while only those who manufacture goods are categorised as manufacturers. However, among manufacturers, there is a single ‘brewer’, a maker of beer. Farmers include both operators of farms as well as those employed on farms. Within the distributive trades, only those who are clearly middlemen are included. Those who may or may not have operated retail-facing businesses such as ‘butcher’ or ‘baker’ have been included as skilled labour and tradesmen. To ensure consistency in categories, I compiled lists of occupations for all three sample series to winnow out those investors who may have been included in two different categories of employment,

Other Archival Materials:

I have relied heavily on archival materials lodged at the Bank of England and at the National Archives at Kew for research on how key decisions relating to the ‘Battle for Capital’ were made. In deciding what to search for at the Bank of England, I initially sought files relating to the deliberations surrounding the design and ultimate sale of War Loan and of National War Bonds. I also sought files relating to the Bank’s coordination of government and private sector efforts to regulate the value of Sterling against other currencies. Many of these are in a series of files beginning with the code C91 and which include records and correspondence of the London Exchange Committee, the American Dollar Securities Committee and to a much smaller extent, those of the Cornhill Committee. The time frame covered the period until the end of the war. I also sought files associated with the decision to convert the 5% War Loan 1920–47 into what became the 3½% War Loan perpetuals only redeemed in 2015. At the National Archives, I initially searched for files relating to ‘War Loan’, again looking for records that could explain the reasons why particular securities were designed as they were. Files T172/746 and T172/747 contained notes of a series of meetings between Treasury officials and the heads of clearing banks and insurance companies in which terms of the 5% War Loan 1929–47 were hammered out. Files T170/84 and T170/85 contained papers of Sir John Bradbury, Joint Permanent Secretary to the Treasury during the war years which Britain was becoming increasingly desperate in its search for capital. However, the unusual design of the 5% War Loan in which the usual practice of deducting tax at standard rate upon payment of dividend led me to suspect that tax avoidance was likely to have gone on. To this end, I searched for files related to the tax treatment of War Loan both at the National Archives and at the Bank of England.

Use of Census and other Public Records

For individuals in the ledgers who had no listed occupation, the most important source of information about the source of private, financial capital comes from Census and Probate records. I had access to a Queen Mary University of London subscription to Ancestry.com which enabled me to electronically query individual names. By matching these with an address, it was possible to determine with certainty at least some of the households of these investors. However, even with electronic search tools, the process is time consuming and certainty in matching investors in the ledger with those in the Census is spotty.

Matching investors with Census records was particularly difficult for those with certain characteristics. Married women, for example, change their surname to that of their husband. Often, but not always, earlier records are listed of a female investor prior to her marriage. Another difficulty is matching investors who gave a London address. This was particularly the case in the first sample which had a very large percentage of retail customers based in London. In some cases, it becomes clear that the investor is using a business address in the ledger but is likely resident elsewhere. Also, investors whose first and surnames were relatively common were difficult to match. Unless there was a characteristic that led to greater certainty, such as a middle initial or a match with a previous address, I did not include their Census data and occupation. I also used the Census to a more limited extent to determine the industry in which certain individuals were engaged. The third sample in particular, which had a higher percentage of male retail investors giving their actual occupation, is a case in point. The Census enquiry was made to try to ascertain the industry in which the investor was engaged. Job titles in the ledgers included 'Manager', 'Commercial Clerk', 'Merchant', 'Company Director' and 'Manufacturer'. Investments ranged from £51 in the case of the spring manufacturer to £10,000 from John Levick of Birmingham, a metals manufacturer.

The most recent open Census is that of 1911. However, Ancestry.com does not include records for those living in Scotland for that year; that requires the purchase of a separate subscription from the Scotland Census. The most recent Scottish resident records date from 1901. I did, however, purchase a modest subscription and did receive personal assistance from staff there.

Footnotes for records taken from the Census, Probate or other reports reflect the catalogue system established by Ancestry.com. The files are typically photocopied from the original report and filled out by hand. The identification style is typically: Name of County, Name of Town, Name of District, Number of Sub-District. At the bottom of the relevant hand-written page is a number reflecting the order in the series in which the page appears. Probate records are similar and carry both the date of death and date of probate, and the range of alphabetically arranged surnames within which the record appears.
In deciding whose name would be searched in the Census, I initially decided to single out those with the largest holdings of War Loan. That appeared to offer the best odds of identifying source of the largest percentage of capital loaned for war. Initially, I singled out investments of £1,000 or larger. However, I became concerned that because fewer women had very large holdings, that I was under-sampling female investors. I then brought the cut-off point for women down to £400 each.

Here are the Census identifications for each of the samples:

1. The 3½% War Loan 1925–28 has 82 of 2,165 investors in the Census. Of these, 17 are women. The smallest holding among those identified in the Census is £100. However, this is sample in which, as a percentage of total investments, roughly half comes from institutions.
2. 5% Series has 105 of 1,940 investors in the Census. Of these, 16 are women. Smallest holding is £100. Of 11 Spinsters, all but four have family backgrounds that explain where their funds come from.
3. Converted to 3½% has 137 of 1,970 investors in the Census. Of these, 39 are women. Of these, the smallest is £50.

Information about individual companies and businesses

These were sourced from the following:

Graces' Guide: https://www.gracesguide.co.uk/Main_Page

Accurately placing towns in the correct county: A Vision of Britain Through Time http://www.visionofbritain.org.uk/

Conclusion: Sampling Method

Broadly, I have used a sampling method designed to overcome most of the technical challenges that confront a researcher using a previously unopened dataset. Although there are some quirks in the method, I have tried to counter these by ensuring that the overall size of the sample was much larger than that required for a 95% confidence level and a 5% confidence interval. By keeping definitions of occupations and geographies unchanged throughout all the sample, I believe I have obtained consistency in my results.

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File C40/427 ‘Government Borrowing: Treasury Bills – War Loan Conversion’, 11 April 1927 – 30 November 1960.

C40/615 ‘Loans, Miscellaneous’, Memos and correspondence. (11 January 1917–22 May 1932)

File C40/995 ‘War Trading with the Enemy’, Sundry Acts of Parliament, (November 1914).

File C48/189 'Discount Office File Relating to Intelligence Function, Cornhill Committee. (February 1915–December 1915).

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